DEMMELER® 3D welding tables
DEMMELER® Manipulators
DEMMELER® COBOT WeldSpace 4.0®



Original 3D welding tables and automation solutions from the inventor

# Highly productive and flexible solutions for welding production





A smooth and efficient production process is crucial to your company's success. The topics of "reducing production costs", "improving quality" and "continuing to develop ergonomics" are and will always be important in order to remain competitive. We see ourselves as a reliable and expert partner to our customers in the process. This drives us to continuously further develop our products and to promote new developments.

We offer you a very wide product portfolio of 3D clamping systems – perfectly tailored to your requirements. You therefore have the right solution for every one of your challenges.

DEMMELER has been creating innovative solutions for machinery and plant construction for over 60 years now. These set global standards. This is also backed up by countless global patents and awards for our products. Our technological advantage based on intensive development work is the reason for many customers' collaboration, often spanning decades.











PREMIUM QUALITY

#### DEMMELER Maschinenbau GmbH & Co. KG · Alpenstraße 10 · 87751 Heimertingen/Germany

Personally liable partner: Johannes Demmeler · DEMMELER Maschinenbau Verwaltungs GmbH/Heimertingen Memmingen County Court/HRB 13149 · Managing Director: Johannes DEMMELER · Place of jurisdiction: Memmingen Memmingen Country Court/HRA 11517 · VAT ID no. DE 812 035 092





### Welcome to DEMMELER — the inventor of the original 3D welding table

Dear business partners and customers,

We are delighted to present to you our high-quality and unique products – some of which are also patented – in a compact, clearly structured format over around 300 pages. Starting with the proven original DEMMELER® quality welding tables in system sizes D28, D22 and D16, including a sophisticated, incredibly durable and extensive range of DEMMELER® accessories, which you can order in coordinated sets or can compile individually from our wide selection to meet your requirements. If you have something bigger in mind, there are no limits when you use our floor plates or rail systems with patented sliding leg system.

You can expect the very highest standards from workspaces that are equipped with our tools. Our Ergonomix M manipulator series promises the best ergonomics and comes with the largest swivel range on the market  $-180^{\circ}$  – as standard. We offer partly automated, highly productive and modern workspaces with our new, ultra innovative robot and COBOT WeldSpace  $4.0^{\circ}$  systems. This is an important step towards continuing to make welding workstations economical and attractive in future.

DEMMELER® original products retain their value, so you are choosing quality without compromising. Your investment in a successful future.

Kind regards, Johannes Demmeler Managing Partner

By phone: +49 (0) 83 35 / 98 59-0
By e-mail: sales@demmeler.com
or in the online shop: www.demmeler.com

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FROM THE BEGINNING -

# PIONEERING SPIRIT, AMBITION AND STRONG VALUES.



with 300 tools





#### **DEMMELER** inventions that span the globe – we have been setting innovative standards in welding production for over 30 years.

In 1961, Ludwig Demmeler founded the company in a garage at the age of 19. With ideas, courage and great commitment, the company has been able to develop very successfully up to the present day. In 2014, Ludwig Demmeler received the Federal Cross of Merit of the Federal Republic of Germany for his entrepreneurial success and for his important voluntary work as a local master craftsman. The second generation, Johannes Demmeler, has been working in the company since 1990 and has been responsible for the success of the group as managing director since 2001.

DEMMELER set the standard on the market as an important milestone back in 1990 with the invention of the 3D clamping system and D28 3D welding table. Originally intended for the company's own production processes, the fixture system proved to be a quantum leap in metalworking and is now an international standard for trade and industry due to the many possible applications and combinations. Today, DEMMELER operates with the highest vertical range of manufacture and highly automated processes, on more than 40,000 m² of factory space. The company's growth was accompanied by several product developments and patents, which were first created only for their own production facilities. Once they have been put through their paces, we deliver these products to tens of thousands of customers worldwide. In addition to the 3D clamping system, these also include the turning, tilting and carousel rotary tables, as well as three-axis manipulators, tool arenas and machine tool components. With our unique new development, the COBOT WeldSpace 4.0°, we have succeeded in developing a perfect product that professionalises welding workstations, starting with small and medium-sized companies, despite the shortage of skilled workers, and thus makes them ready for the future. In the future, you can continue to rely on our quality and the innovation of the original, made by DEMMELER, to achieve the best results.



and production of the ROBOTIX manipulator

and production of the PPC clamping bolt

and production of turning units up to 25 t

and production of rotary tables with pallet changeover systems

and production of the 3D welding table system D22 and production of direct-drive rotary tables

and production of the COBOT WeldSpace 4.0® a welding cell for automated welding

# Alongside outstanding 3D welding tables – what you can expect from us





#### **Unparalleled product benefits**

#### + Excellent value for money

The multifunctional tool means that you need far less equipment to clamp your workpieces. So you save both money and storage space.

# + Optimum access to the workpiece – ergonomically designed This saves time in production and increases quality. The multifunctional tool can be set up in such a way that it takes up the smallest amount of space on the table. The rest of the tool can be adapted so that it "disappears" under the surface of the table inside the practical "clever toolbox".

# + Extremely long service life for a return on your investment Through top "Made in Germany" quality, we reduce life-cycle costs and ensure the longest service life for our products.

#### + All products are made in-house - in Germany

As the inventor of the 3D clamping system, all of our highly automated manufacturing processes are performed in-house at our Heimertingen site. We set up our systems ourselves and so we are our own most critical customer.

#### + Professionals work with DEMMELER

We supply high-quality clamping systems which make work fun. Made by professionals for professionals!

#### + Find out information and order online

For more information about our wide range of products, please visit our website at www.demmeler.com.







#### **Globally linked**

With our global distribution network, we can be found wherever our solutions can help make production more efficient. We use on-site consultations to develop tailor-made solutions in partnership with our customers. Always in line with the philosophy: You have a need, we have the solution! Our customers around the world benefit from our wealth of knowledge acquired throughout numerous successful projects.

#### A reliable partner by your side

Our many worldwide sales and service representatives are always there for you. To contact one of our sales partners directly, visit our website at www.demmeler.com/distribution-partners.



Subscribe to our YouTube channel for many example products and applications.







THE 3D CLAMPING SYSTEM FROM DEMMELER. THE ORIGINAL.

# ONE SYSTEM FOR VARIOUS TASKS

Nowadays, solutions need to perfectly fulfil various tasks. Ideally as a complete solution, a modular, coordinated system. This is why we continuously optimise our products to meet the needs of all relevant industries. This results in innovative and efficient solutions which perfectly fulfil their intended purpose. Robust and reliable. Efficient and economical. Modular and versatile. That's the 3D clamping system from DEMMELER.





#### THE STANDARD SOLUTION FOR INDUSTRY AND TRADE.



**Automation** 



Machinery and plant construction



Steel constructions/ metal constructions



**Vehicle construction** 



**Shipbuilding** 



**Aircraft construction** 



# OUR 3D CLAMPING SY TO MEET YOUR REQUI

# The 3D clamping system from DEMMELER. Unlimited possibilities.

No matter the scale of your projects. As a provider of systems and solutions, DEMMELER doesn't aim to offer everything that is possible but rather only what a user needs for their individual requirements. A system that can be integrated and extended without any hassle and actually offers added value. And therefore a system that makes a difference. The 3D clamping system from DEMMELER. Unlimited possibilities.





#### It couldn't be simpler

Simple handling, modular and durable. Our wide product range of 3D clamping systems is perfectly tailored to meet your requirements.

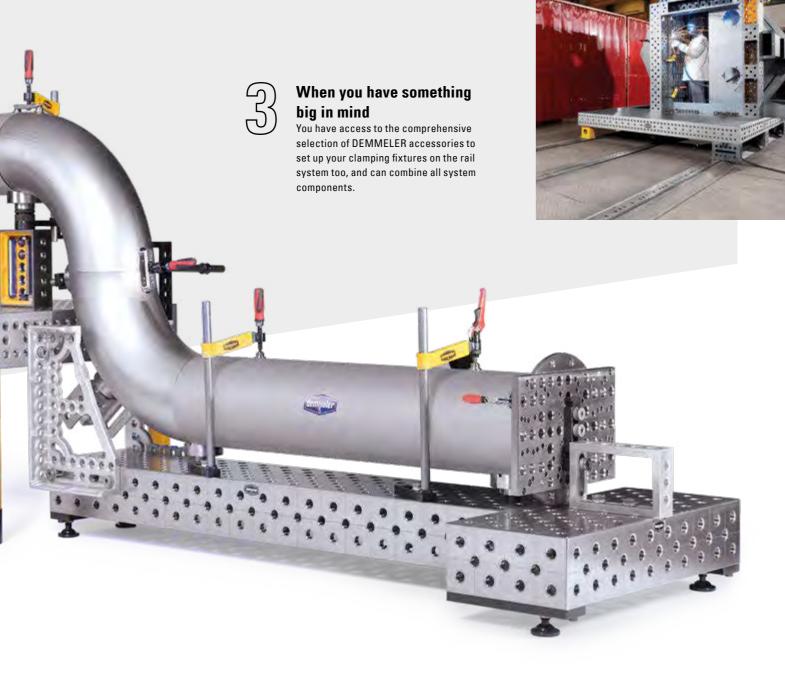


#### More freedom for your work

If the component is larger, the worktop of the 3D welding table can easily be extended with the system components from DEMMELER.



# STEM GROWS REMENTS



# SIMPLY PERFECT. THE EXTENSIVE RANGE OF ACCESSORIES FROM DEMIMELER.

Accessories from DEMMELER offer maximum freedom and flexibility in everyday work. Achieve results precisely and economically – with the product range that is perfectly tailored to all purposes, you have the ideal solution for any task.

















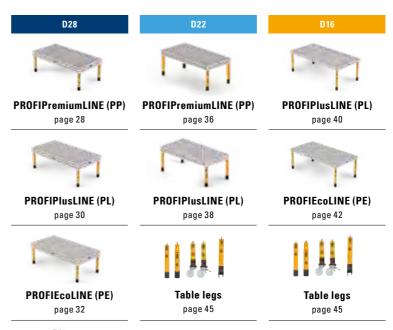






# DEMMELER® 3D welding tables

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HobbyLINE (H) page 34



3D measuring, assembly and adjustment table page 35



Table legs page 45



page 48



# **Sophisticated down to the smallest detail** – product highlights

#### Welding results

When using the 3D clamping system, the optimum flow of electricity between the electrode/filler wire and earth connection is vitally important for the welding results. That is why DEMMELER optimises the material properties of its welding tables and accessories and guarantees outstanding precision for optimum form fits. Although hardened welding tables are even more robust and better protected against weld spatter, their conductivity tends to be reduced. Here again, DEMMELER has developed optimum solutions in the form of the DEMONT 760 M and DEMONT 890 M versions. That's how DEMMELER ensures optimum conditions for ideal welding results!

#### DEMONT 760 M and DEMONT 890 M ①

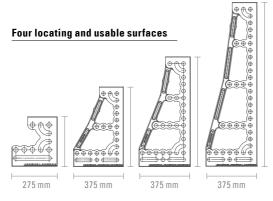
Excellent conductivity for optimum welding results, extremely tough design and outstanding protection against weld spatter SOLID standard hardness ②

Outstanding conductivity for optimum welding results, tough design and good protection against weld spatter

#### PROFIPremiumLINE locating and clamping angles

The aluminium titanium design is lightweight enough to permit optimised, extremely simple handling. Only by using the patented PPC clamping bolt is it possible to clamp the angles without causing wear. This results an unlimited service life.

The kidney-shaped 90° system groove makes continuous angle adjustment possible. The extended face plate and increased number of cross braces provide additional bores for clamping. The precision scaling makes adjustment much easier.



Angle heights, aluminium titanium: 300, 600, 800 and 1200 mm

Angle heights, hardened cast: 300, 600 and 800 mm

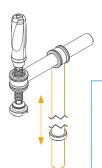
Reinforcements in the corners with a 90° system groove in the shape of a kidney allow continuously variable use, even with angular adjustment











#### Screw clamp

The DEMMELER screw clamps are constructed using round tubes. This makes them extremely tough and the greatest possible clamping forces are achieved. DEMMELER screw clamps can be extended on a modular basis – for example, they can be used as a 270° screw clamp. Using the performance screw clamp, it is also possible to clamp very high components with the same precision.

#### PPC bolts - the perfect connection

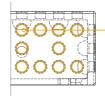
- Self-centring, force-fitting and low-wear clamping
- Very quick clamping and releasing
- · Force-fitting through full-area contact
- Reduces material wear
- Minimal susceptibility to dirt
- Extremely tough guaranteeing a long service life



Even force distribution across the polygonal bolts reduces bore hole wear compared to conventional bolts. The cone clamping system achieves a support surface that is 100 times larger.

#### Intelligent system grid

Thanks to the three-row drilling pattern on the side post, DEMMELER welding tables can be extended on a modular basis — and offer outstanding stability, toughness and a very high load-bearing capacity.



Additional bores in the side posts for even more clamping options

#### **Pivoting leg**

The extremely solid design ensures a very high load-bearing capacity  $-\,3000\,kg$  per leg. The leg sleeve prevents pinching and reduces wear of the tube assembly. This also provides a convenient way of using the earth connection. It also protects the threaded spindle against dirt and wear. Precision adjustment is possible and fixing is stable and simple.



Pivoting leg based on round tube, unlike square table legs does not get caught on or collide with the edges of the table legs.

Leg sleeves prevent pinching of the welding tube and protect the threaded spindle against dirt.





# The ideal welding table for every application

The system sizes of the 3D clamping system from DEMMELER!

Ø 28

#### For everyday, large welded constructions



#### D28 PROFIPremiumLINE (PP)

- 50 x 50 mm grid
- Three-row bore pattern on the table side plates
- 50 mm grid in the top and bottom rows
- Additional 100 mm grid in the centre



#### D28 PROFIPIUSLINE (PL)

- 100 x 100 mm diagonal grid
- Three-row bore pattern on the table side plates
- 50 mm grid in the top and bottom rows
- Additional 100 mm grid in the centre



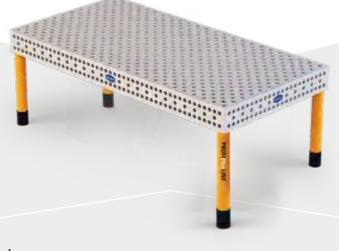
#### D28 PROFIEcoLINE (PE)

- 100 x 100 mm grid
- Three-row bore pattern on the table side plates
- 50 mm grid in the top and bottom rows
- Additional 100 mm grid in the centre



#### D28 HobbyLINE (H)

- 100 x 100 mm grid
- Worktop approx. 25 mm high with system bores in a 100 mm x 100 mm grid









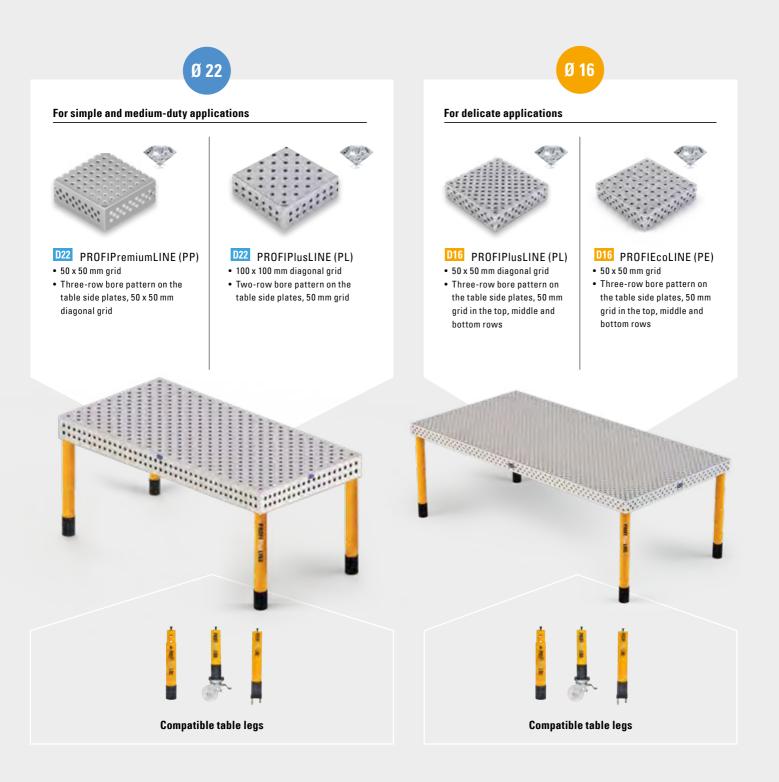


Compatible table legs and clamping options



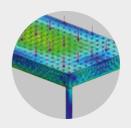


Optimum positioning of the workpiece not only makes work more accurate but also much more effective. In addition to their hardness, system tables from DEMMELER have clear advantages over conventional tables. Original 3D welding tables from DEMMELER stand out due to their extreme robustness and durability. With the specially optimised DEMONT hardening process, you get the best surface properties with a hardness of up to 890 Vickers – making them wear-free and even more durable.



# The benefits of a 3D clamping system from DEMMELER!

These include intelligent system grids, axis designations with precision scaling, additional bores and protective countersinks for optimum protection of tools and table surfaces.



#### Max. load

All of our welding tables are generously sized, super sturdy and generally optimised with FEM calculations.





#### **Precision scaling**

Axis designation in x and y directions. Precision scaling included as standard.



#### Protective countersink

Optimum bolt and clamp insertion with simultaneous protection of the table surface against damage from materials, even in the case of extreme strain on the system bore or when used with aluminium.



#### **Additional bores**

Additional bores in the side posts for even more clamping options.



#### Standard leg

The extremely robust design ensures a very high load-bearing capacity – 3000 kg per leg. The leg sleeve prevents pinching and reduces wear of the tube assembly. This also provides a convenient way of using the earth connection. It also protects the threaded spindle against dirt and wear. Precision adjustment is possible and fixing is stable and simple.







# THE tough ones from DEMMELER – for the toughest requirements

When using the 3D clamping system, the optimum flow of electricity between the electrode/filler wire and earth connection is vitally important for the welding results. That is why DEMMELER optimises the material properties of its welding tables and accessories and guarantees outstanding precision for optimum form fits. Although hardened welding tables are even more robust and better protected against weld spatter, their conductivity tends to be reduced. Here again, DEMMELER has developed optimum solutions in the form of the DEMONT 760 M and DEMONT 890 M versions. That's how DEMMELER ensures optimum conditions for ideal welding results!

#### DEMONT 760 M and 890 M

Excellent conductivity for optimum welding results, extremely tough design and outstanding protection against weld spatter.

#### **SOLID**

Outstanding conductivity for optimum welding results, tough design and good protection against weld spatter.

#### **DEMONT 760 M**

High-strength hardened steel up to 760 Vickers

#### **SOLID**

High-strengtl

		DEMONT 890 M	DEMONT 760 M	SOLID
Load	High bearing loads	<b>***</b>	<b>***</b> *	<b>****</b>
Evenness	For outstanding tool quality	****	<b>***</b>	<b>***</b> *
Conductivity	For optimum welding results when using the earth connection	***	***	****
Base hardness	For high impact resistance	<b>****</b>	$\diamond$	$\diamond$
Surface hardness	Resistant to weld spatter	****	***	<b>**</b>



#### Table legs for your welding table.









#### D28 D22 D16

#### Standard leg

- Pivoting legs, with ± 30 mm precision adjustment
- Stable M30 threaded spindle
- The leg sleeve protects the threaded spindle against dirt and prevents pinching of the tube assembly
- Also suitable as a support leg in combination with horizontal U-shaped spacer block from a length of 1 m
- Including countersunk mounting screw M24 x 60
- Powder-coated leg tube

To order a standard leg, page 45

#### D28 D22 D16

#### Telescopic leg

- Pivoting legs, with ± 30 mm precision adjustment
- Stable M30 threaded spindle
- The leg sleeve protects the threaded spindle against dirt and prevents pinching of the tube assembly
- Telescopic adjustment range of 350 mm in 50 mm increments
- For flexible height adjustment of the welding table
- Including countersunk mounting screw M24 x 60
- Powder-coated leg tube

To order a telescopic leg, page 45

#### D28 D22 D16

#### Heavy-duty wheel leg

- With ± 30 mm precision adjustment
- Stable M30 threaded spindle
- The leg sleeve protects the threaded spindle against dirt and prevents pinching of the tube assembly
- Robust design
- With 360° swivel castor
- Max. load capacity 600 kg
- Including countersunk mounting screw M24 x 60
- · Powder-coated leg tube

To order a heavy-duty wheel leg, page 45

#### D28 D22 D16

#### **Anchoring leg**

- With ± 30 mm precision adjustment
- Stable M30 threaded spindle
- The leg sleeve protects the threaded spindle against dirt and prevents pinching of the tube assembly
- For secure attachment to the floor of the production facility to protect against tension, pressure and movement (e.g. robot use)
- Including countersunk mounting screw M24 x 60 and, for secure anchoring to the floor, 2x drop-in anchors, 2x cap screws M16 x 40
- Powder-coated leg tube

To order an anchoring leg, page 45













# Connecting elements for a larger surface area and more space.



#### D28

#### Table leg for spacer block

- Connecting element between U-shaped spacer blocks or between 3D welding table and support and base rail
- Different set-up heights can be adapted to the workpiece by simply exchanging the table legs
- Available for D28

You can find detailed information about the product in the section about the rail system, page 104

#### D28

#### Sliding leg with castors

- Set-up system components can be moved without using lifting equipment or a crane
- Different set-up heights can be adapted to the workpiece by simply exchanging the table legs
- Highest load capacity in the working position because the leg is supported over its entire surface on the rail
- Available for D28

You can find detailed information about the product in the section about the rail system, page 105

#### D28

#### **Connecting frame**

- Precise positioning of 3D work tables using pivoting leg or in a lengthwise and crosswise direction on the support and base rail
- Available for D28

#### To order a connecting frame, page 49

#### D28

#### **Scissor lift**

- Continuously variable height adjustment
- · With safety edge
- Fully adapted to 3D welding table D28
- Including manual control
- Internal/external power unit (depending on size)
- Available for D28

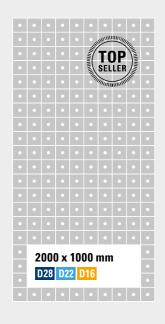
To order a scissor lift, page 48

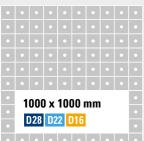




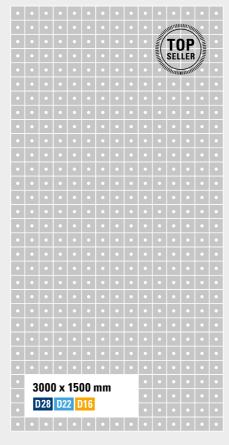


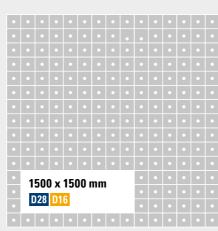


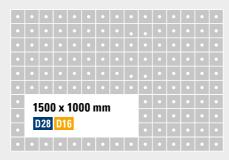


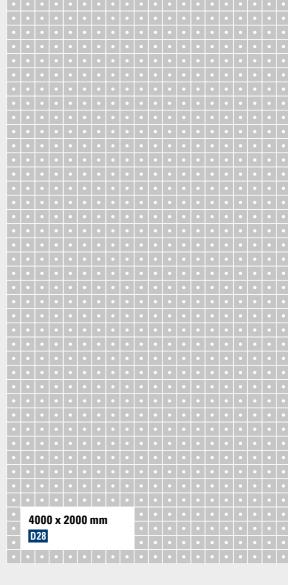


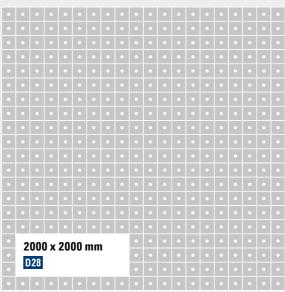






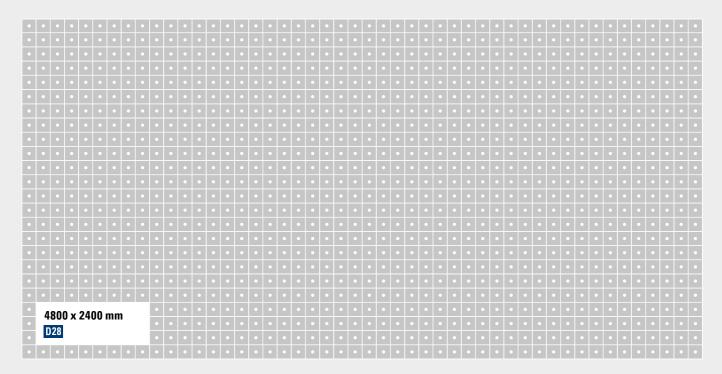


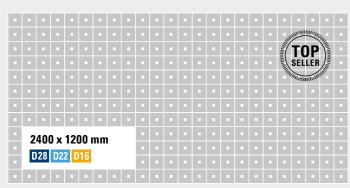


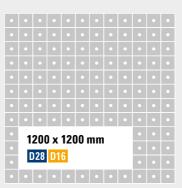


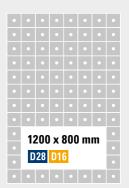












#### D28 Standard table sizes

L in mm	W in mm	H in mm
1000	1000	200
1200	800	200
1200	1200	200
1500	1000	200
1500	1500	200
2000	1000	200
2000	2000	200
2400	1200	200
3000	1500	200
4000	2000	200
4800	2400	200

<b>D22</b>	Stan	dard	tahl	e sizes

L in mm	W in mm	H in mm
1000	1000	150
2000	1000	150
2400	1200	150
3000	1500	150



#### 3000\* 1500

D16 Standard table sizes

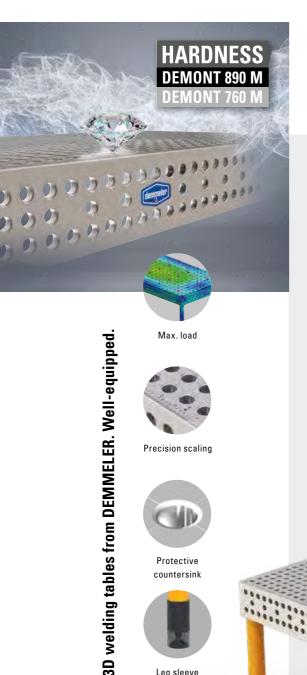
W in mm

H in mm

L in mm

\*Consisting of two 1500 x 1500 x 100 mm

Custom dimensions and materials (e.g. stainless steel) are available on request.



Up to 400 % more clamping options.

#### **DEMMELER® 3D welding tables D28 PROFIPremiumLINE (PP)**

#### 3D welding table D28 PROFIPremiumLINE (PP)



- Worktop with D28 system bores in a 50 x 50 mm grid, resulting in approx. 400% more clamping options than with PROFIEcoLINE and conventional welding tables and approx. 100% more clamping options than with PROFIPIusLINE
- Three-row bore pattern on the table side plates with D28 system bores: 50 mm grid in the top and bottom rows and an additional 100 mm grid in the centre, almost doubling the options for extension and clamping
- Table sizes optionally available in hardened versions DEMONT 760 M and DEMONT 890 M
- · All system bores with protective countersink, perfect design and ultimate functionality
- · Optimised outside table edges
- Improved table reinforcement through additional cross-ribs
- Continuous grid lines in X and Y directions, spaced 100 mm apart
- Precision scaling with millimetre graduation, also available with the DEMONT 760 M and DEMONT 890 M options
- · Coordinate marking of the bores in the X and Y directions
- DEMMELER logo recessed in all four side plates
- · Table legs with precision adjustment, round design with pivoting leg
- Leg sleeve to protect the tube assembly
- Special dimensions and optional drilling patterns (e.g. M16, M20, M24) possible on request
- The table is also available in a stainless steel version on request

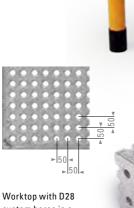


Precision scaling

countersink



Leg sleeve



system bores in a 50 x 50 mm grid



Three-row bore pattern with 50 mm grid in the top and bottom rows

and additional 100 mm grid in the centre

28







#### The table sizes. With or without standard table legs.

						D28	
3D welding table D28 PROFIPremiumLINE (PP) — without standard table legs			SOLID Hardened Hardened DEMONT 760 M DEMONT 890				
L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	Item no.
1000 x 1000	200	290	_	No legs	PP28-01001-000	PP28-01001-500	PP28-01001-700
1200 x 800	200	280	_	No legs	PP28-11019-000	PP28-11019-500	PP28-11019-700
1200 x 1200	200	380	_	No legs	PP28-01056-000	PP28-01056-500	PP28-01056-700
1500 x 1000	200	390	_	No legs	PP28-01011-000	PP28-01011-500	PP28-01011-700
1500 x 1500	200	530	_	No legs	PP28-01031-000	PP28-01031-500	PP28-01031-700
2000 x 1000	200	500	_	No legs	PP28-01002-000	PP28-01002-500	PP28-01002-700
2000 x 2000	200	1000	_	No legs	PP28-01006-000	PP28-01006-500	PP28-01006-700
2400 x 1200	200	710	_	No legs	PP28-01003-000	PP28-01003-500	PP28-01003-700
3000 x 1500	200	1010	_	No legs	PP28-01004-000	PP28-01004-500	PP28-01004-700
4000 x 2000	200	1780	_	No legs	PP28-01005-000	PP28-01005-500	PP28-01005-700
4800 x 2400	200	2550	_	No legs	PP28-11085-000	PP28-11085-500	PP28-11085-700

				Europe -		D28	
3D welding table D28 PROFIPremiumLINE (PP) – with standard table legs					SOLID	Hardened DEMONT 760 M	Hardened DEMONT 890 M
L x W in mm	H in mm*	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	Item no.
1000 x 1000	850 ±30	324	12000	4	PP28-01001-001	PP28-01001-011	PP28-01001-021
1200 x 800	850 ±30	314	12000	4	PP28-11019-001	PP28-11019-011	PP28-11019-021
1200 x 1200	850 ±30	414	12000	4	PP28-01056-001	PP28-01056-011	PP28-01056-021
1500 x 1000	850 ±30	424	12000	4	PP28-01011-001	PP28-01011-011	PP28-01011-021
1500 x 1500	850 ±30	564	12000	4	PP28-01031-001	PP28-01031-011	PP28-01031-021
2000 x 1000	850 ±30	534	12000	4	PP28-01002-001	PP28-01002-011	PP28-01002-021
2000 x 2000	850 ±30	1034	12000	4	PP28-01006-001	PP28-01006-011	PP28-01006-021
2400 x 1200	850 ±30	744	12000	4	PP28-01003-001	PP28-01003-011	PP28-01003-021
3000 x 1500	850 ±30	1061	18000	6	PP28-01004-001	PP28-01004-011	PP28-01004-021
4000 x 2000	850 ±30	1831	18000	6	PP28-01005-001	PP28-01005-011	PP28-01005-021
4800 x 2400	850 ±30	2644	33000	11	PP28-11085-001	PP28-11085-011	PP28-11085-021

<sup>\*</sup>The length of the standard table legs in the basic configuration is 650 mm  $\pm 30$  mm.

#### Different leg versions are possible for this system size D28

















For table mounting versions for the rail system, see page 104 onwards



You can also find out about the leg versions  $% \left( \mathbf{r}\right) =\left( \mathbf{r}\right) \left( \mathbf{r}\right)$ and connecting elements online.

The standard table legs are also available in a length of 750 mm  $\pm 30$  mm, see page 45.



Max. load



Precision scaling



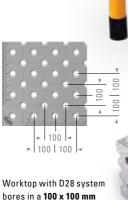
3D welding tables from DEMMELER. Well-equipped

Protective countersink



Leg sleeve

double grid



Our bestseller.

# DEMMELER® 3D welding tables D28 PROFIPIusLINE (PL)

#### 3D welding table D28 PROFIPIusLINE (PL)



- Worktop with D28 system bores in a 100 x 100 mm double grid, resulting in approx. 80% more clamping options than with PROFIEcoLINE and conventional welding tables
- Three-row bore pattern on the table side plates with D28 system bores: 50 mm grid in the top
  and bottom rows and an additional 100 mm grid in the centre, almost doubling the options for
  extension and clamping
- Table sizes optionally available in hardened versions DEMONT 760 M and DEMONT 890 M
- All system bores with protective countersink, perfect design and ultimate functionality
- Optimised outside table edges
- Improved table reinforcement through additional cross-ribs
- Continuous grid lines in X and Y directions, spaced 100 mm apart
- Precision scaling with millimetre graduation, also available with the DEMONT 760 M and DEMONT 890 M options
- Coordinate marking of the bores in the X and Y directions
- DEMMELER logo recessed in all four side plates
- Table legs with precision adjustment, round design with pivoting leg
- Leg sleeve to protect the tube assembly
- Special dimensions and optional drilling patterns (e.g. M16, M20, M24) possible on request
- The table is also available in a stainless steel version on request



ERPREMIUZ







#### The table sizes. With or without standard table legs.

				On.		D28	
3D welding table D28 PROFIPIusLINE (PL) – without standard table legs				SOLID Hardened DEMONT 760 M		Hardened DEMONT 890 M	
L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	Item no.
1000 x 1000	200	310	_	No legs	PL28-01001-000	PL28-01001-500	PL28-01001-700
1200 x 800	200	300	_	No legs	PL28-11019-000	PL28-11019-500	PL28-11019-700
1200 x 1200	200	410	_	No legs	PL28-01056-000	PL28-01056-500	PL28-01056-700
1500 x 1000	200	430	_	No legs	PL28-01011-000	PL28-01011-500	PL28-01011-700
1500 x 1500	200	590	_	No legs	PL28-01031-000	PL28-01031-500	PL28-01031-700
2000 x 1000	200	550	_	No legs	PL28-01002-000	PL28-01002-500	PL28-01002-700
2000 x 2000	200	1050	_	No legs	PL28-01006-000	PL28-01006-500	PL28-01006-700
2400 x 1200	200	790	_	No legs	PL28-01003-000	PL28-01003-500	PL28-01003-700
3000 x 1500	200	1150	_	No legs	PL28-01004-000	PL28-01004-500	PL28-01004-700
4000 x 2000	200	1980	_	No legs	PL28-01005-000	PL28-01005-500	PL28-01005-700
4800 x 2400	200	2830	_	No legs	PL28-11085-000	PL28-11085-500	PL28-11085-700

						D28	
3D welding table D28 PROFIPIusLINE (PL) – with standard table legs				SOLID	Hardened DEMONT 760 M	Hardened DEMONT 890 M	
L x W in mm	H in mm*	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	Item no.
1000 x 1000	$850 \pm 30$	344	12000	4	PL28-01001-001	PL28-01001-011	PL28-01001-021
1200 x 800	$850 \pm 30$	334	12000	4	PL28-11019-001	PL28-11019-011	PL28-11019-021
1200 x 1200	850 ±30	444	12000	4	PL28-01056-001	PL28-01056-011	PL28-01056-021
1500 x 1000	$850 \pm 30$	464	12000	4	PL28-01011-001	PL28-01011-011	PL28-01011-021
1500 x 1500	850 ±30	624	12000	4	PL28-01031-001	PL28-01031-011	PL28-01031-021
2000 x 1000	850 ±30	584	12000	4	PL28-01002-001	PL28-01002-011	PL28-01002-021
2000 x 2000	850 ±30	1084	12000	4	PL28-01006-001	PL28-01006-011	PL28-01006-021
2400 x 1200	850 ±30	824	12000	4	PL28-01003-001	PL28-01003-011	PL28-01003-021
3000 x 1500	850 ±30	1201	18000	6	PL28-01004-001	PL28-01004-011	PL28-01004-021
4000 x 2000	850 ±30	2031	18000	6	PL28-01005-001	PL28-01005-011	PL28-01005-021
4800 x 2400	850 ±30	2925	33000	11	PL28-11085-001	PL28-11085-011	PL28-11085-021

<sup>\*</sup>The length of the standard table legs in the basic configuration is 650 mm  $\pm 30$  mm.

#### Different leg versions are possible for this system size D28

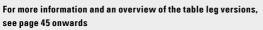


















For table mounting versions for the rail system, see page 104 onwards



You can also find out about the leg versions  $% \left( \mathbf{r}\right) =\left( \mathbf{r}\right) \left( \mathbf{r}\right)$ and connecting elements online.

The standard table legs are also available in a length of 750 mm  $\pm 30$  mm, see page 45.



Max. load



Precision scaling

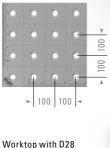


3D welding tables from DEMMELER. Well-equipped

Protective countersink



Leg sleeve



Worktop with D28 system bores in a 100 x 100 mm grid

Functional and versatile.

# DEMMELER® 3D welding tables D28 PROFIEcoLINE (PE)

#### 3D welding table D28 PROFIEcoLINE (PE)



- Worktop with D28 system bores in a 100 x 100 mm grid
- Three-row bore pattern on the table side plates with D28 system bores: 50 mm grid in the top
  and bottom rows and an additional 100 mm grid in the centre, almost doubling the options for
  extension and clamping
- Table sizes optionally available in hardened versions DEMONT 760 M and DEMONT 890 M
- · All system bores with protective countersink, perfect design and ultimate functionality
- Optimised outside table edges
- Improved table reinforcement through additional cross-ribs
- Continuous grid lines in X and Y directions, spaced 100 mm apart
- Precision scaling with millimetre graduation, also available with the DEMONT 760 M and DEMONT 890 M options
- Coordinate marking of the bores in the X and Y directions
- DEMMELER logo recessed in all four side plates
- Table legs with precision adjustment, round design with pivoting leg
- · Leg sleeve to protect the tube assembly
- Special dimensions and optional drilling patterns (e.g. M16, M20, M24) possible on request
- The table is also available in a stainless steel version on request









#### The table sizes. With or without standard table legs.

				0		D28	
3D welding table D28 PROFIEcoLINE (PE) – without standard table legs				SOLID	Hardened DEMONT 760 M	Hardened DEMONT 890 M	
L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	Item no.
1000 x 1000	200	330	_	No legs	PE28-01001-000	PE28-01001-500	PE28-01001-700
1200 x 800	200	310	_	No legs	PE28-11019-000	PE28-11019-500	PE28-11019-700
1200 x 1200	200	430	_	No legs	PE28-01056-000	PE28-01056-500	PE28-01056-700
1500 x 1000	200	450	_	No legs	PE28-01011-000	PE28-01011-500	PE28-01011-700
1500 x 1500	200	610	_	No legs	PE28-01031-000	PE28-01031-500	PE28-01031-700
2000 x 1000	200	570	_	No legs	PE28-01002-000	PE28-01002-500	PE28-01002-700
2000 x 2000	200	1100	_	No legs	PE28-01006-000	PE28-01006-500	PE28-01006-700
2400 x 1200	200	820	_	No legs	PE28-01003-000	PE28-01003-500	PE28-01003-700
3000 x 1500	200	1180	-	No legs	PE28-01004-000	PE28-01004-500	PE28-01004-700
4000 x 2000	200	2090	_	No legs	PE28-01005-000	PE28-01005-500	PE28-01005-700
4800 x 2400	200	2980	-	No legs	PE28-11085-000	PE28-11085-500	PE28-11085-700

						D28	
3D welding table D28 PROFIEcoLINE (PE) — with standard table legs					SOLID	Hardened DEMONT 760 M	Hardened DEMONT 890 M
L x W in mm	H in mm*	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	Item no.
1000 x 1000	850 ±30	364	12000	4	PE28-01001-001	PE28-01001-011	PE28-01001-021
1200 x 800	850 ±30	344	12000	4	PE28-11019-001	PE28-11019-011	PE28-11019-021
1200 x 1200	850 ±30	464	12000	4	PE28-01056-001	PE28-01056-011	PE28-01056-021
1500 x 1000	850 ±30	484	12000	4	PE28-01011-001	PE28-01011-011	PE28-01011-021
1500 x 1500	850 ±30	644	12000	4	PE28-01031-001	PE28-01031-011	PE28-01031-021
2000 x 1000	850 ±30	604	12000	4	PE28-01002-001	PE28-01002-011	PE28-01002-021
2000 x 2000	850 ±30	1134	12000	4	PE28-01006-001	PE28-01006-011	PE28-01006-021
2400 x 1200	850 ±30	854	12000	4	PE28-01003-001	PE28-01003-011	PE28-01003-021
3000 x 1500	850 ±30	1231	18000	6	PE28-01004-001	PE28-01004-011	PE28-01004-021
4000 x 2000	850 ±30	2141	18000	6	PE28-01005-001	PE28-01005-011	PE28-01005-021
4800 x 2400	850 ±30	3074	33000	11	PE28-11085-001	PE28-11085-011	PE28-11085-021

<sup>\*</sup>The length of the standard table legs in the basic configuration is 650 mm  $\pm 30$  mm.

#### Different leg versions are possible for this system size D28



















For table mounting versions for the rail system, see page 104 onwards



You can also find out about the leg versions  $% \left( \mathbf{r}\right) =\left( \mathbf{r}\right) \left( \mathbf{r}\right)$ and connecting elements online.

The standard table legs are also available in a length of 750 mm  $\pm 30$  mm, see page 45.

#### **Board HobbyLINE (H) D28**

- Cost-effective alternative for low loads
- Worktop approx. 25 mm high with D28 system bores in a 100 mm x 100 mm grid
- Accessories for all D28 system lines (PROFIEcoLINE, PROFI-PlusLINE and PROFIPremiumLINE) can be used on the worktop
- M8 tapped holes on all four sides of the worktop including eight outer stops with screw
- All system bores with protective countersink, perfect design and ultimate functionality
- Optimised outside table edges
- Continuous grid lines in X and Y directions, spaced 100 mm apart
- Table legs with precision adjustment, round design with pivoting leg
- Leg sleeve to protect the tube assembly
- Special dimensions and optional drilling patterns (e.g. M16, M20, M24) possible on request. The table is also available in a stainless steel version on request.



						D28
oard HobbyLINE (I	H) D28 – without s	SOLID				
	L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	ltem no.
	1000 x 1000	25	180	-	No legs	H28-01001-000
	1200 x 800	25	180	-	No legs	H28-11019-000
	1200 x 1200	25	260	-	No legs	H28-01056-000
	1500 x 1000	25	270	-	No legs	H28-01011-000
	2000 x 1000	25	360	_	No legs	H28-01002-000
	2400 x 1200	25	510	_	No leas	H28-01003-000

byLINE (H) D28 – with standard table legs								
	L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	ltem no.		
No.	1000 x 1000	850 ±30	204	600	4	H28-01001-001		
1	1200 x 800	850 ±30	204	600	4	H28-11019-001		
å.	1200 x 1200	850 ±30	284	600	4	H28-01056-001		
	1500 x 1000	850 ±30	300	600	5	H28-01011-001		
	2000 x 1000	850 ±30	390	600	5	H28-01002-001		
	2400 x 1200	850 ±30	540	600	5	H28-01003-001		

#### Standard table leg D28 for Hobby board



H in mm	Approx. weight in kg	Item no.
826 ±30	6	PL16-10010-005

#### Different leg versions are possible for this system size D28







For additional leg versions, see page 45 onwards

#### 3D welding tables from DEMMELER. Well-equipped.







Precision scaling

Protective countersink

Leg sleeve





#### 3D measuring, assembly and adjustment table D28

- Evenness 0.1 mm/m
- Outstanding precision for adjusting, measuring and assembling components
- Optimised outside table edges
- Including precision scaling/grid lines
- Improved table reinforcement through additional cross-ribs
- DEMMELER logo recessed in all four side plates



						D28
3D measuring, asso	SOLID					
	L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	Item no.
	2000 x 1000	200	610	_	No legs	M28-01002-000
	2400 x 1200	200	890	_	No legs	M28-01003-000
	3000 x 1500	200	1300	_	No legs	M28-01004-000

						D28		
measuring, asse	mbly and adjustn	nent table D28 -	- with standard table legs			SOLID		
Contract of the Contract of th	L x W in mm	H in mm*	Approx. weight in kg	Max. load in kg	Number of legs	Item no.		
-	2000 x 1000	850 ±30	644	12000	4	M28-01002-001		
	2400 x 1200	850 ±30	924	12000	4	M28-01003-001		
	3000 x 1500	850 ±30	1354	18000	6	M28-01004-001		

<sup>\*</sup>The length of the standard table legs in the basic configuration is 650 mm  $\pm30$  mm.

#### 3D welding tables from DEMMELER. Well-equipped.



Precision scaling



0.1 mm/m



Leg sleeve

#### Different leg versions are possible for this system size D28







For additional leg versions, see page 45

D28

The standard table legs are also available in a length of 750 mm  $\pm 30$  mm, see page 45.



Precision scaling

Up to 200 % more clamping options.

# DEMMELER® 3D welding tables D22 PROFIPremiumLINE (PP)

#### 3D welding table D22 PROFIPremiumLINE (PP)

D22

- Worktop with D22 system bores in a 50 x 50 mm grid, resulting in 200% more clamping options than with PROFIPIusLINE
- Three-row bore pattern on the table side plates with D22 system bore in a 50 x 50 mm diagonal grid, doubling the expansion and clamping options
- Table sizes optionally available in a hardened version DEMONT 760 M
- All system bores with protective countersink, perfect design and ultimate functionality
- · Optimised outside table edges
- Improved table reinforcement through additional cross-ribs
- Continuous grid lines in X and Y directions, spaced 100 mm apart
- Precision scaling with millimetre division, including with the DEMONT 760 M option
- Coordinate marking of the bores in the X and Y directions
- DEMMELER logo recessed in all four side plates
- Table legs with precision adjustment, round design with pivoting leg
- Leg sleeve to protect the tube assembly
- Special dimensions and optional drilling patterns (e.g. M16, M20, M24) possible on request
- The table is also available in a stainless steel version on request







Worktop with D22 system bores in a **50 x 50 mm grid** 

RPREMI







#### The table sizes. With or without standard table legs.

					D22		
3D welding table D22 PROFIPremiumLINE (PP) – without standard table legs					SOLID	Hardened DEMONT 760 M	
L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	
1000 x 1000	150	200	_	No legs	PP22-01001-000	PP22-01001-500	
2000 x 1000	150	350	_	No legs	PP22-01002-000	PP22-01002-500	
2400 x 1200	150	500	_	No legs	PP22-01003-000	PP22-01003-500	
3000 x 1500	150	735	_	No legs	PP22-01004-000	PP22-01004-500	

						D22
3D welding table D22 PROFIPremiumLINE (PP) – with standard table legs					SOLID	Hardened DEMONT 760 M
L x W in mm	H in mm*	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.
1000 x 1000	850 ±30	234	12000	4	PP22-01001-001	PP22-01001-011
2000 x 1000	850 ±30	423	12000	4	PP22-01002-001	PP22-01002-011
2400 x 1200	850 ±30	534	12000	4	PP22-01003-001	PP22-01003-011
3000 x 1500	850 ±30	786	18000	6	PP22-01004-001	PP22-01004-011

<sup>\*</sup>The length of the standard table legs in the basic configuration is 700 mm  $\pm 30$  mm.

#### Different leg versions are possible for this system size D22





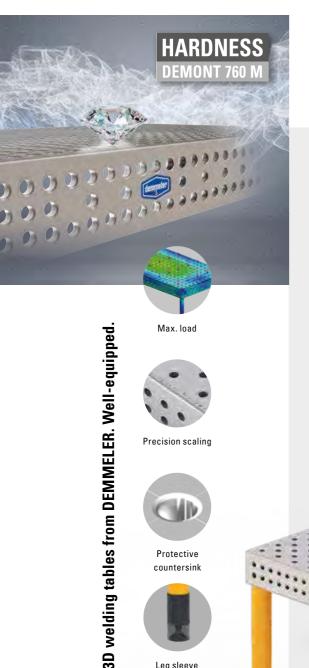


For more information and an overview of the table leg versions, see page 45 onwards

You can also find out about the leg versions online.



The standard table legs are also available in a length of 800 mm  $\pm 30$  mm, see page 45.



The all-rounder.

## **DEMMELER® 3D welding tables D22 PROFIPIUSLINE (PL)**

#### 3D welding table D22 PROFIPIusLINE (PP)

**D22** 

- Worktop with D22 system bores in a 100 x 100 mm diagonal grid
- Two-row bore pattern on the table side plates with D22 system bores in a 50 mm grid
- Table sizes optionally available in a hardened version DEMONT 760 M
- · All system bores with protective countersink, perfect design and ultimate functionality
- Optimised outside table edges
- · Improved table reinforcement through additional cross-ribs
- Continuous grid lines in X and Y directions, spaced 100 mm apart
- Precision scaling with millimetre division, including with the DEMONT 760 M option
- Coordinate marking of the bores in the X and Y directions
- DEMMELER logo recessed in all four side plates
- Table legs with precision adjustment, round design with pivoting leg
- Leg sleeve to protect the tube assembly
- Special dimensions and optional drilling patterns (e.g. M16, M20, M24) possible on request
- · The table is also available in a stainless steel version on request



Precision scaling

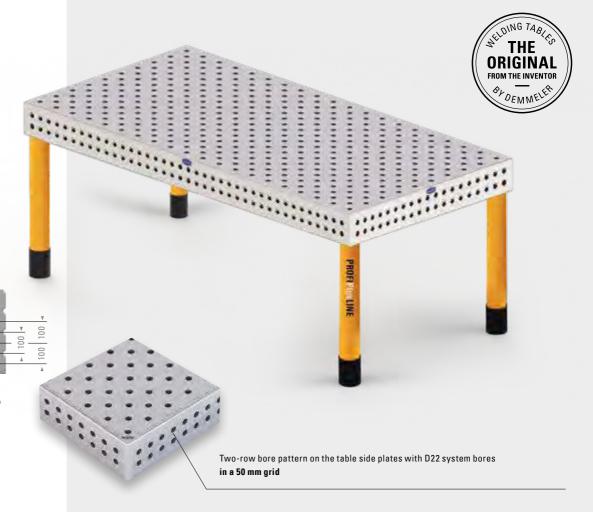
Protective countersink

Leg sleeve

**100** 100

Worktop with D22 system bores in a 100 x 100 mm

diagonal grid









#### The table sizes. With or without standard table legs.

			A	part to		D22
3D welding table D22 PROFIPIusLINE (PL) – without standard table legs					SOLID	Hardened DEMONT 760 M
L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.
1000 x 1000	150	210	_	No legs	PL22-01001-000	PL22-01001-500
2000 x 1000	150	375	_	No legs	PL22-01002-000	PL22-01002-500
2400 x 1200	150	535	_	No legs	PL22-01003-000	PL22-01003-500
3000 x 1500	150	785	_	No legs	PL22-01004-000	PL22-01004-500

			¥.			D22
3D welding table D22 PROFIPIusLINE (PL) — with standard table legs			,		SOLID	Hardened DEMONT 760 M
L x W in mm	H in mm*	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.
1000 x 1000	850 ±30	244	12000	4	PL22-01001-001	PL22-01001-011
2000 x 1000	850 ±30	409	12000	4	PL22-01002-001	PL22-01002-011
2400 x 1200	850 ±30	569	12000	4	PL22-01003-001	PL22-01003-011
3000 x 1500	850 ±30	836	18000	6	PL22-01004-001	PL22-01004-011

<sup>\*</sup>The length of the standard table legs in the basic configuration is 700 mm  $\pm 30$  mm.

## Different leg versions are possible for this system size D22





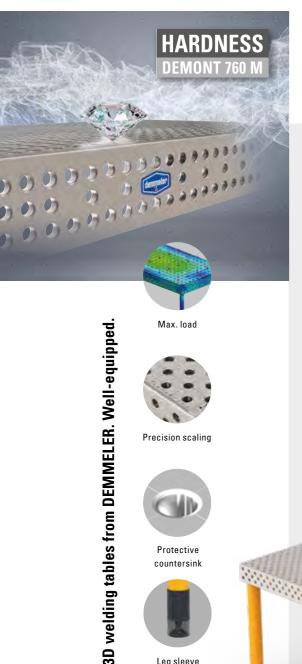


For more information and an overview of the table leg versions, see page 45 onwards

You can also find out about the leg versions online.



The standard table legs are also available in a length of 800 mm  $\pm 30$  mm, see page 45.





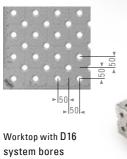
Precision scaling



Protective countersink



Leg sleeve



in a 50 x 50 mm

double grid

Up to 80 % more clamping options.

## **DEMMELER® 3D welding tables D16 PROFIPIUSLINE (PL)**

#### 3D welding table D16 PROFIPIusLINE (PL)

D16

- Worktop with D16 system bores in a 50 x 50 mm double grid, resulting in approx. 80% more clamping options than with PROFIEcoLINE and conventional welding tables
- Three-row bore pattern on the table side plates with D16 system bores, 50 mm grid in the top, middle and bottom rows
- Table sizes optionally available in a hardened version DEMONT 760 M
- · All system bores with protective countersink, perfect design and ultimate functionality
- · Optimised outside table edges
- Continuous grid lines in X and Y directions, spaced 50 mm apart
- Precision scaling with millimetre division, including with the DEMONT 760 M option
- · Coordinate marking of the bores in the X and Y directions
- DEMMELER logo recessed in all four side plates
- Table legs with precision adjustment, round design with pivoting leg
- · Leg sleeve to protect the tube assembly
- Special dimensions and optional drilling patterns (e.g. M16, M20, M24) possible on request
- · The table is also available in a stainless steel version on request









#### The table sizes. With or without standard table legs.

						D16	
3D welding table without standard		usLINE (PL) –	ı		SOLID	Hardened DEMONT 760 M	
L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	
1000 x 500	100	70	_	No legs	PL16-01000-000	PL16-01000-500	
1000 x 1000	100	119	_	No legs	PL16-01001-000	PL16-01001-500	
1200 x 800	100	123	_	No legs	PL16-11019-000	PL16-11019-500	
1200 x 1200	100	162	_	No legs	PL16-01056-000	PL16-01056-500	
1500 x 1000	100	179	_	No legs	PL16-01017-000	PL16-01017-500	
1500 x 1500	100	253	_	No legs	PL16-01011-000	PL16-01011-500	
2000 x 1000	100	229	_	No legs	PL16-01002-000	PL16-01002-500	
2400 x 1200	100	326	_	No legs	PL16-01003-000	PL16-01003-500	
3000** x 1500	100	506	_	No legs	PL16-01004-000	PL16-01004-500	

<sup>\*\*</sup>Consisting of two 1500 x 1500 x 100 mm

					D16		
3D welding table D16 PROFIPIusLINE (PL) – with standard table legs					SOLID	Hardened DEMONT 760 M	
L x W in mm	H in mm*	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	
1000 x 500	850 ±30	104	8000	4	PL16-01000-001	PL16-01000-011	
1000 x 1000	850 ±30	154	8000	4	PL16-01001-001	PL16-01001-011	
1200 x 800	850 ±30	154	8000	4	PL16-11019-001	PL16-11019-011	
1200 x 1200	850 ±30	194	8000	4	PL16-01056-001	PL16-01056-011	
1500 x 1000	850 ±30	204	8000	4	PL16-01017-001	PL16-01017-011	
1500 x 1500	850 ±30	274	8000	4	PL16-01011-001	PL16-01011-011	
2000 x 1000	850 ±30	264	8000	4	PL16-01002-001	PL16-01002-011	
2400 x 1200	850 ±30	364	8000	4	PL16-01003-001	PL16-01003-011	
3000** x 1500	850 ±30	548	16000	8	PL16-01004-001	PL16-01004-011	

<sup>\*</sup>The length of the standard table legs in the basic configuration is 750 mm  $\pm 30$  mm.

## Different leg versions are possible for this system size D16







For more information and an overview of the table leg versions, see page 45 onwards

You can also find out about **the leg versions** online.



The standard table legs are also available in a length of 850 mm  $\pm$ 30 mm, see page 45.

<sup>\*\*</sup>Consisting of two 1500 x 1500 x 100 mm



For delicate applications.

## DEMMELER® 3D welding tables D16 PROFIEcoLINE (PE)

#### 3D welding table D16 PROFIEcoLINE (PE)

**D16** 

- Worktop with D16 system bores in a 50 x 50 mm grid
- Three-row bore pattern on the table side plates with D16 system bores, 50 mm grid in the top, middle and bottom rows
- Table sizes optionally available in a hardened version DEMONT 760 M
- All system bores with protective countersink, perfect design and ultimate functionality
- Optimised outside table edges
- Continuous grid lines in X and Y directions, spaced 50 mm apart
- Precision scaling with millimetre division, including with the DEMONT 760 M option
- Coordinate marking of the bores in the X and Y directions
- DEMMELER logo recessed in all four side plates
- Table legs with precision adjustment, round design with pivoting leg
- · Leg sleeve to protect the tube assembly
- Special dimensions and optional drilling patterns (e.g. M16, M20, M24) possible on request
- The table is also available in a stainless steel version on request





Precision scaling



in a 50 mm grid in the top, middle and bottom rows

Worktop with D16 system bores in a 50 x 50 mm grid







#### The table sizes. With or without standard table legs.

						D16		
3D welding table D16 PROFIEcoLINE (PE) — without standard table legs					SOLID	Hardened DEMONT 760 M		
L x W in mm	H in mm	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.		
1000 x 500	100	74	_	No legs	PE16-01000-000	PE16-01000-500		
1000 x 1000	100	127	_	No legs	PE16-01001-000	PE16-01001-500		
1200 x 800	100	131	_	No legs	PE16-11019-000	PE16-11019-500		
1200 x 1200	100	173	_	No legs	PE16-01056-000	PE16-01056-500		
1500 x 1000	100	190	_	No legs	PE16-01017-000	PE16-01017-500		
1500 x 1500	100	270	_	No legs	PE16-01011-000	PE16-01011-500		
2000 x 1000	100	238	_	No legs	PE16-01002-000	PE16-01002-500		
2400 x 1200	100	347	_	No legs	PE16-01003-000	PE16-01003-500		
3000** x 1500	100	540	_	No legs	PE16-01004-000	PE16-01004-500		

<sup>\*\*</sup>Consisting of two 1500 x 1500 x 100 mm

					D16		
3D welding table with standard ta		oLINE (PE) –			SOLID	Hardened DEMONT 760 M	
L x W in mm	H in mm*	Approx. weight in kg	Max. load in kg	Number of legs	Item no.	Item no.	
1000 x 500	850 ±30	109	8000	4	PE16-01000-001	PE16-01000-011	
1000 x 1000	850 ±30	164	8000	4	PE16-01001-001	PE16-01001-011	
1200 x 800	850 ±30	164	8000	4	PE16-11019-001	PE16-11019-011	
1200 x 1200	850 ±30	204	8000	4	PE16-01056-001	PE16-01056-011	
1500 x 1000	850 ±30	214	8000	4	PE16-01017-001	PE16-01017-011	
1500 x 1500	850 ±30	284	8000	4	PE16-01011-001	PE16-01011-011	
2000 x 1000	850 ±30	274	8000	4	PE16-01002-001	PE16-01002-011	
2400 x 1200	850 ±30	384	8000	4	PE16-01003-001	PE16-01003-011	
3000** x 1500	850 ±30	568	16000	8	PE16-01004-001	PE16-01004-011	

<sup>\*</sup>The length of the standard table legs in the basic configuration is 750 mm  $\pm$  30 mm.

## Different leg versions are possible for this system size D16







For more information and an overview of the table leg versions, see page 45 onwards

You can also find out about the leg versions online.



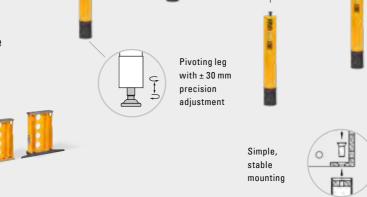
The standard table legs are also available in a length of 850 mm  $\pm 30$  mm, see page 45.

<sup>\*\*</sup>Consisting of two 1500 x 1500 x 100 mm

#### Legs you can rely on!

Efficient working guaranteed! Starting with the standard leg with precision adjustment, through to the mobile heavy-duty wheel leg, a variable selection of table legs are available for the various table systems, making any application possible. This offers you greatest possible freedom during your manufacturing processes. Thanks to the intelligent design, the legs can be fixed simply and stably. The robust construction guarantees a long service life. For this purpose, leg sleeves prevent pinching of the welding tube and protect the threaded spindle against dirt.

You can find compatible legs for setting up your system on the DEMMELER® rail system from page 96 onwards.



#### The right table legs for any application

	S	tandard le	eg .	Те	lescopic l	leg	Hea	vy-duty w	heel	A	nchoring l	eg
	D28	D22	D16	D28	D22	D16	D28	D22	D16	D28	D22	D16
PROFIPremiumLINE	•	•		•	•		•	•		•	•	
PROFIPLusLINE	•	•	•	•	•	•	•	•	•	•	•	•
PROFIEcoLINE	•		•	•		•	•		•	•		•
HobbyLINE	•			•			•			•		

#### Ordering example



 $\boldsymbol{A}$  From page 28 onwards, select the required worktop, which results in order item  $\boldsymbol{A}$ :

e.g. 1x PL28-01031-000



- 1. the required leg type
- 2. in the necessary quantity,

which results in order item B: e.g. 4x PL28-10010-001



 $\boldsymbol{C}\,$  The two order item numbers make up your order from DEMMELER.

e.g. 1x PL28-01031-000 (A) + 4x PL28-10010-001 (B)





#### 1. Table leg types

andard leg		D28	D22	D16
	H in mm	650*1 ± 30	700 ± 30	750 ± 30
<b>↑ 3</b>	Weight in kg	6,3	6,6	5,3
in .	Max. load in kg	3000	3000	2000
н	Item no.	PL28-10010-000	PL22-10010-000	PL16-10010-000
<b>I</b>	H in mm	750*1 ± 30	800 ± 30	$850 \pm 30$
<u> </u>	Weight in kg	6,9	7,2	5,7
	Max. load in kg	3000	3000	2000
	Item no.	PL28-10010-191	PL22-10010-007	PL16-10010-006

Telescopic leg			D28	D22	D16
		H in mm	550 to 900 ± 30	600 to 950 ± 30	550 to 900 ± 30
<b>↑</b> [	1	Weight in kg	10,2	10,6	6,12
*		Max. load in kg	3000	3000	2000
н	Adjustable	Item no.	PL28-10010-001	PL22-10010-001	PL16-10010-001
<b>*</b>	height in a 50 mm grid				

Heavy-d	luty wheel			D28	D22	D16
	1	H in mm	650*1 ± 30	700 ± 30	750 ± 30	
<b>1</b>	臺	養	Max. load in kg	600	600	300
		=	Heavy-duty wheel with bra	ake		
Н			Weight in kg	10	10	8,6
			Item no.	PL28-10010-002	PL22-10010-002	PL16-10010-002
	H		Heavy-duty wheel without	brake		
	3	13	Weight in kg	9	9,4	8,15
	With	Without	Item no.	PL28-10010-003	PL22-10010-003	PL16-10010-003
	brake	brake				

Anchoring leg			D28	D22	D16
		H in mm	650*1 ± 30	700 ± 30	750 ± 30
1	Screws	Weight in kg	8,5	8,8	7,3
<b>\$</b>	· M·	Max. load in kg	3000	3000	2000
н		Item no.	PL28-10010-004	PL22-10010-004	PL16-10010-004
	Drop-in anchor				

#### 2. Number of table legs for each table size

Table size	1000 x 500	1000 x 1000	1200 x 800	1200 x 1200	1500 x 1000	1500 x 1500	2000 x 1000	2000 x 2000	2400 x 1200	3000 x 1500	4000 x 2000	4800 x 2400
Standard leg	4	4	4	4	4	4	4	4	4	6*4	6	11
Telescopic leg	4	4	4	4	4	4	4	4	4	6*4	6	11
Heavy-duty wheel	2*2 + 2*3	2*2 + 2*3	2*2 + 2*3	2*2 + 2*3	2*2 + 2*3	2*2 + 2*3	2*2 + 2*3	2*2 + 2*3	2*2 + 2*3	2*2 + 4*3*4	2*2 + 4*3	2*2 + 9*3
Anchoring leg	4	4	4	4	4	4	4	4	4	6*4	6	11

<sup>\*1</sup> Other leg heights possible on request \*2 Wheel with brake \*3 Wheel without brake \*4 D16 welding tables consisting of 2x 1500 x 1500 x 100; eight table legs are required in total



# Both horizontally and vertically — clamp large components precisely and securely

#### Flexibly moving system components horizontally on the rail system

The versatility of the rail system allows you to flexibly extend or divide your workspaces, offering crucial advantages for varying component sizes or different work steps. The combination of 3D welding tables, spacer blocks and accessories results in countless clamping options. The patented DEMMELER® sliding legs with castors are easy to move on the DEMMELER® support and base rails and can be positioned with precision.

**DEMMELER®** sliding legs with castors make it possible to easily move set-up system components on the DEMMELER® rail system.







#### Scissor lifts for ergonomic work at the ideal height

In addition to various table legs, we also offer solutions for especially heavy components. Our scissor lift allows you to adjust the height of the welding and clamping table quickly and continuously. This enables every welding and assembly workstation to be lifted or lowered to the ideal height, individually adapting to different clamping situations.



Scissor lift with continuously variable height adjustment.
Available in the standard table sizes.









#### **Scissor lift**

- · Continuously variable height adjustment
- · With safety edge
- Fully adapted to the 3D welding table
- · Including manual control
- Internal/external power unit (depending on size)
- · The mounting kit is not included in the scope of delivery



#### Scissor lift



				DZ8
For table size in mm	Load capacity	H in mm	Approx. weight in kg	Item no.
1000 x 1000	1 t – table weight	385-1310	155	00016008
1200 x 800	1 t – table weight	200-900	300	00090594
1200 x 1200	2 t – table weight	200-900	530	00041421
1500 x 1000	2t-table weight	200-1000	500	00040820
1500 x 1500	2t-table weight	280-1080	620	00002460
2000 x 1000	2 t – table weight	230-1230	650	00000628
2000 x 2000	2t-table weight	280-1280	950	00090591
2400 x 1200	2t-table weight	260-1560	810	00000629
3000 x 1500	3 t – table weight	350-1950	1000	00000627
4000 x 2000	5 t – table weight	460-2060	2100	00019552
4800 x 2400	6 t – table weight	460-2060	2100	00090601

Other sizes available on request.



The scissor lift is available for all D28 standard table sizes



Practical manual control for height adjustment



Continuously adjustable height

#### **Ordering example**



- A From page 28 onwards, select the required worktop, which results in order item A:
  - e.g. 1x PL28-01003-700



- ${\bf B}\,$  From this page, select the compatible scissor lift, which results in order item  ${\bf B}\colon$ 
  - e.g. 1x 00000629



- C The two order item numbers make up your order from DEMMELER. The compatible mounting kit is offered to you automatically.
  - e.g. 1x PL28-01003-700 (A) + 1x 00000629 (B)





#### **Connecting frame**

- Precise positioning of 3D welding tables is possible in a lengthwise and crosswise direction on the support and base rail
- · Very stable design for extremely high loads
- You can find compatible worktops on page 102



Connecting frame						D28
	For table size in mm	Track width in mm	H in mm	Approx. weight in kg	Max. load in kg	Item no.
	1000 x 1000					
	1200 x 1200		000	150	15000	PL00-02004-000
	1500 x 1000	1000/1000	600	158	15000	FL00-02004-000
	1500 x 1500					
	2000 x 1000					
	2000 x 2000					
	2400 x 1200	2000/1000	600	229	15000	PL00-02004-001
	3000 x 1500					
	4000 x 2000					
	4000 x 2000	4000/2000	000	F10	20000	PL00-02004-002
	4800 x 2400	4000/2000	600	516	20000	F LUU-UZUU4-UUZ

Other sizes available on request.

#### **Pivoting leg M27**

- The leg spindle can be used in any D28 system bore, for example to position the connecting frame or other system components on pivoting legs
- Scope of delivery: Sturdy M27 threaded spindle with ball head, pivoting leg disc and 2 x M27 nuts
- Not for table leg corners



D28

#### Pivoting leg M27



			DZU
A in mm	B in mm	C in mm	Item no.
140	M27	78	D28-10010-000



#### **Compatible system accessories**

#### Support and base rail

See page 98



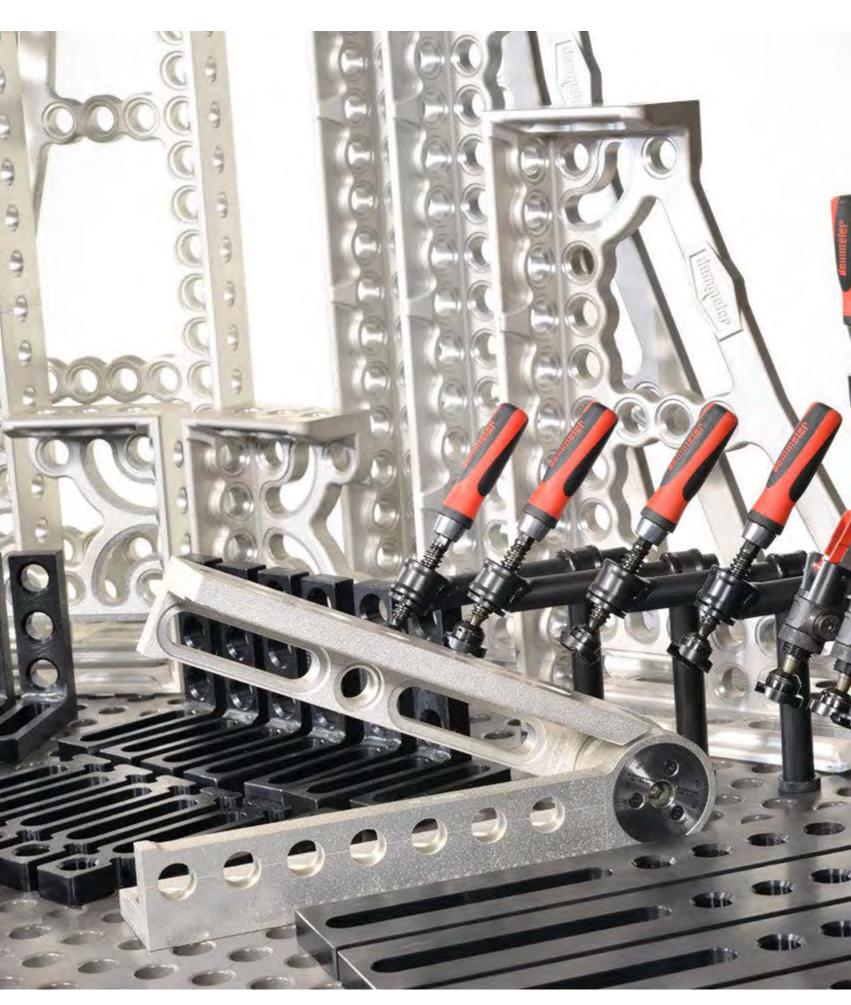
#### Support and base rail XL See page 98



#### Support and base rail DUO

See page 100











### Sets

#### D28



PROFIPremiumLINE sets 710, 720, 730, 740 from page 52



PROFIPIUSLINE sets 710, 720, 730, 740 from page 58



PROFIEcoLINE sets 710, 720, 730, 740 from page 64

#### **D22**



PROFIPIUSLINE sets 710, 720, 730 from page 68

#### D46



PROFIPIUSLINE sets 155, 255, 720, 355 from page 72



PROFIEcoLINE sets 710, 720, 730, 200, 300 from page 78



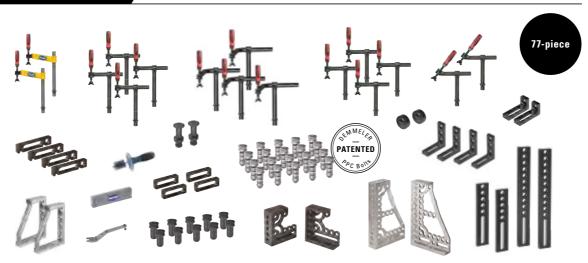
PROFIPrem	iumLINE set 710 D28	D28
Quantity	Description	Item no.
4	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000
1	Locating and clamping angle D28 PP 300, right	P28-03002-000
1	Locating and clamping angle D28 PP 300, left	P28-03002-001
4	Universal stop D28 large, L225, two notches	D28-05001-010
2	Stop bar D28, L500	D28-05003-000
4	Sliding stop D28, L150	D28-05015-000
6	Stop and positioning bolt D28	D28-06009-000
12	PPC bolt D28, short	D28-06025-000
2	Compensating screw clamp D28 200, L350, spindle	D28-07002-000
4	Screw clamp 180° D28, L270, spindle	D28-07005-000
4	Performance clamp D28, L270, spindle	D28-07009-033
1	Round brush D28, splash guard	D28-10002-000
1	Assembly lever, L250, WAF 14	D00-10016-001
	46-piece set	P28-52000-710

DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIPremiumLINE set on a PROFIPIusLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.

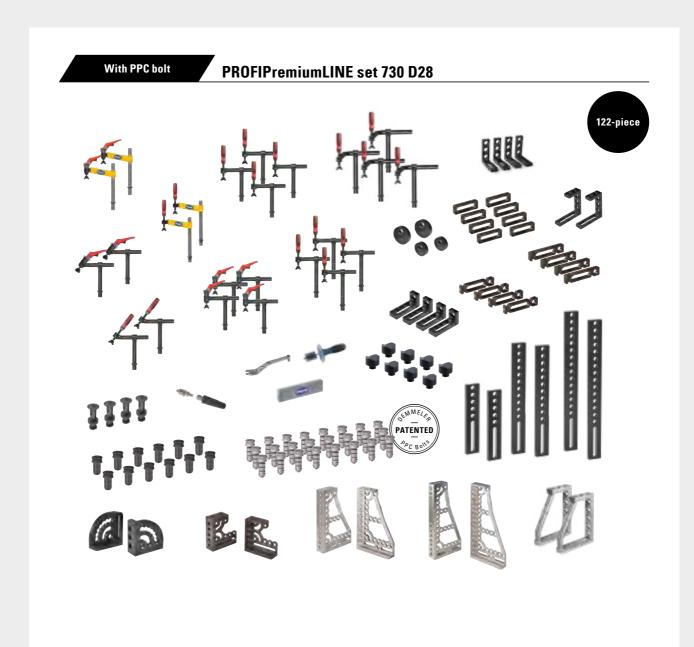




#### With PPC bolt PROFIPremiumLINE set 720 D28



PROFIPrem	iumLINE set 720 D28	D28
Quantity	Description	Item no.
4	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000
2	Locating and clamping angle D28 PL small, L175, bore/oblong hole	D28-03001-005
2	Locating and clamping angle D28 PL, L300, aluminium titanium	PP28-03001-017
1	Locating and clamping angle D28 PP 300, right	P28-03002-000
1	Locating and clamping angle D28 PP 300, left	P28-03002-001
1	Locating and clamping angle D28 PP 600, right, aluminium titanium	P28-03003-002
1	Locating and clamping angle D28 PP 600, left, aluminium titanium	P28-03003-003
4	Universal stop D28 large, L225, two notches	D28-05001-010
2	Stop bar D28, L500	D28-05003-000
2	Stop bar D28, L800	D28-05003-001
2	Stop disc D28, Ø 100 mm	D28-05013-001
4	Sliding stop D28, L150	D28-05015-000
10	Stop and positioning bolt D28	D28-06009-000
20	PPC bolt D28, short, WAF 14	D28-06025-000
2	Compensating screw clamp D28 200, L350, spindle	D28-07002-000
4	Screw clamp 180° D28, L350, spindle	D28-07005-014
4	Screw clamp 180° D28, L500, spindle	D28-07005-033
2	Variable screw clamp 45° D28, L270, spindle	D28-07009-011
4	Performance clamp D28, L270, spindle	D28-07009-033
2	Support set with thread D28, 22–105 mm, continuously variable	D28-09001-005
1	Round brush D28, splash guard	D28-10002-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Assembly lever, L250, WAF 14	D00-10016-001
	77-piece set	P28-52000-720

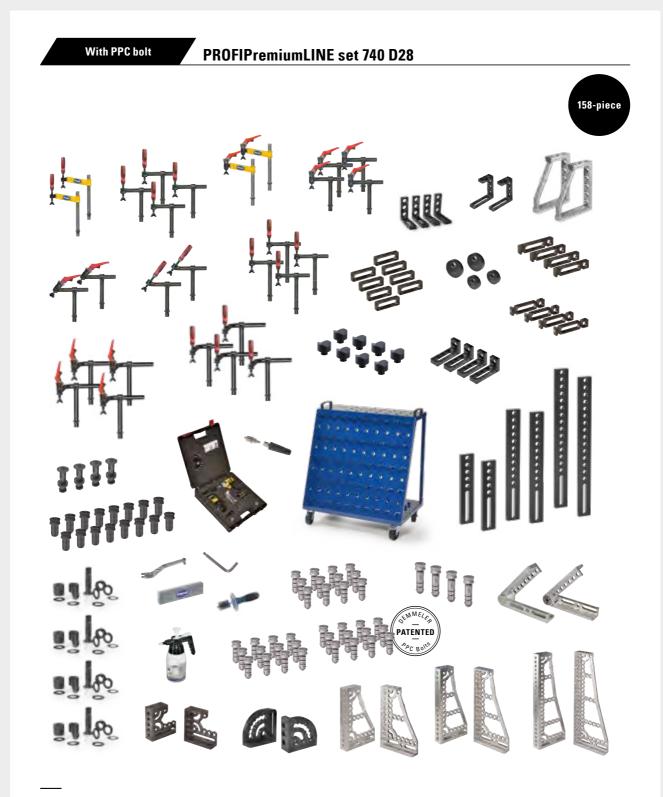


DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIPremiumLINE set on a PROFIPIusLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.





PKUHIPrem	iumLINE set 730 D28	D28
Quantity	Description	ltem no.
4	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000
4	Locating and clamping angle D28 PL small, L175, bore/oblong hole	D28-03001-005
1	Locating and clamping angle D28 PP 300, right	P28-03002-000
2	Locating and clamping angle D28 PL 200, with face plate	PL28-03001-015
2	Locating and clamping angle D28 PL, L300, aluminium titanium	PP28-03001-017
1	Locating and clamping angle D28 PP 300, left	P28-03002-001
1	Locating and clamping angle D28 PP 600, right, aluminium titanium	P28-03003-002
1	Locating and clamping angle D28 PP 600, left, aluminium titanium	P28-03003-003
1	Locating and clamping angle D28 PP 800, right, aluminium titanium	P28-03004-000
1	Locating and clamping angle D28 PP 800, left, aluminium titanium	P28-03004-001
4	Universal stop D28 large, L225, clamping bolt	D28-05001-001
4	Universal stop D28 large, L225, with two notches	D28-05001-010
2	Stop bar D28, L500	D28-05003-000
2	Stop bar D28, L800	D28-05003-001
2	Stop bar D28, L1000	D28-05003-008
2	Stop disc D28, Ø 75 mm	D28-05013-000
2	Stop disc D28, Ø 100 mm	D28-05013-001
1	Angle bracket D28 PL, L200, right, aluminium titanium	P28-05013-013
1	Angle bracket D28 PL, L200, left, aluminium titanium	P28-05013-014
8	Sliding stop D28, L150	D28-05015-000
24	PPC bolt D28, short, WAF 14	D28-06025-000
12	Stop and positioning bolt D28	D28-06009-000
2	Compensating screw clamp D28 150, L350, quick-action clamping cylinder	D28-07001-001
2	Compensating screw clamp D28 200, L350, spindle	D28-07002-000
4	Screw clamp 180° D28, L350, spindle	D28-07005-014
4	Screw clamp 180° D28, L350, quick-action clamping cylinder	D28-07005-015
4	Screw clamp 180° D28, L500, spindle	D28-07005-033
2	Variable screw clamp 45° D28, L270, spindle	D28-07009-011
2	Variable screw clamp 45° D28, L350, quick-action clamping cylinder	D28-07009-012
4	Performance clamp D28, L270, spindle	D28-07009-033
4	Support set with thread D28, 22–105 mm, continuously variable	D28-09001-005
8	V-block holder D28, Ø 58 mm	D28-09003-000
1	Round brush D28, splash guard	D28-10002-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Earth connection D28/D22/D16	D00-10009-000
1	Assembly lever, L250, WAF 14	D00-10016-001
	122-piece set	P28-52000-730



DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIPremiumLINE set on a PROFIPIusLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.





PROFIPrem	iumLINE set 740 D28	D28
Quantity	Description	ltem no.
ļ	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000
ļ	Locating and clamping angle D28 PL small, L175, bore/oblong hole	D28-03001-005
2	Locating and clamping angle D28 PL 200, face plate	PL28-03001-015
2	Locating and clamping angle D28 PL, L300, aluminium titanium	PP28-03001-017
	Locating and clamping angle D28 PP 300, right	P28-03002-000
	Locating and clamping angle D28 PP 300, left	P28-03002-001
<u> </u>	Locating and clamping angle D28 PP 600, right, aluminium titanium	P28-03003-002
	Locating and clamping angle D28 PP 600, left, aluminium titanium	P28-03003-003
ļ	Locating and clamping angle D28 PP 800, right, aluminium titanium	P28-03004-000
	Locating and clamping angle D28 PP 800, left, aluminium titanium	P28-03004-001
	Locating and clamping angle D28 PP 1200, right, aluminium titanium	P28-03009-000
	Locating and clamping angle D28 PP 1200, left, aluminium titanium	P28-03009-001
	Universal pivot and tilt angle D28, right, aluminium titanium	D28-03007-004
	Universal pivot and tilt angle D28, left, aluminium titanium	D28-03007-005
,	Universal stop D28 large, L225, clamping bolt	D28-05001-001
1	Universal stop D28 large, L225, two notches	D28-05001-010
<u> </u>	Stop bar D28, L500	D28-05003-000
<u> </u>	Stop bar D28, L800	D28-05003-001
2	Stop bar D28, L1000	D28-05003-008
2	Stop disc D28, Ø 75 mm	D28-05013-000
<u> </u>	Stop disc D28, Ø 100 mm	D28-05013-001
	Angle bracket D28 PL, L200, right, aluminium titanium	P28-05013-013
	Angle bracket D28 PL, L200, left, aluminium titanium	P28-05013-014
}	Sliding stop D28, L150	D28-05015-000
6	Stop and positioning bolt D28	D28-06009-000
36	PPC bolt D28, short, WAF 14	D28-06025-000
	PPC bolt D28, long, WAF 14	D28-06026-000
<u> </u>	Compensating screw clamp D28 150, L350, quick-action clamping cylinder	D28-07001-001
<u> </u>	Compensating screw clamp D28 200, L350, spindle	D28-07002-000
	Screw clamp 180° D28, L350, spindle	D28-07005-014
	Screw clamp 180° D28, L350, quick-action clamping cylinder	D28-07005-015
<u> </u>	Screw clamp 180° D28, L500, spindle	D28-07005-033
<u> </u>	Variable screw clamp 45° D28, L270, spindle	D28-07009-011
<u> </u>	Variable screw clamp 45° D28, L350, quick-action clamping cylinder	D28-07009-012
ļ	Performance clamp D28, L270, spindle	D28-07009-033
<u> </u>	Performance clamp D28, L270, quick-action clamping cylinder	D28-07009-035
ļ	11-piece support set D28, 5–100 mm	D28-09001-000
ļ	Support set with thread D28, 22–105 mm, continuously variable	D28-09001-005
<u> </u>	V-block holder D28, Ø 58 mm	D28-09003-000
	Round brush D28, splash guard	D28-10002-000
	Pump bottle with 1 l of protective spray	D00-10005-000
	Bench stone, L200, two-sided rough/fine	D00-10003-000
	Hex key WAF 14, ball head	D28-10008-000
	Earth connection D28/D22/D16	D00-10009-000
	Assembly lever, L250, WAF 14	D00-10009-000
<u>'</u> 	Accessory cart D28	D28-11001-000
· 	Electric screwdriver with quick-change coupling	D28-13050-000
	158-piece set	P28-52000-740

#### PROFIPIusLINE set 710 D28



44-piece

PROFIPIus	LINE set 710 D28	D28
Quantity	Description	ltem no.
4	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000
2	Locating and clamping angle D28 PL large, L275, bore/oblong hole	PE28-03008-000
4	Universal stop D28 large, L225, with four notches	D28-05001-000
2	Universal stop D28 L300	D28-05009-000
4	Sliding stop D28, L150	D28-05015-000
12	PC bolt D28, short, WAF 14	D28-06001-000
6	Stop and positioning bolt D28	D28-06009-000
4	Compensating screw clamp D28 200, L350, spindle	D28-07002-000
4	Variable screw clamp 45° D28, L270, spindle	D28-07009-000
1	Round brush D28, splash guard	D28-10002-000
1	Assembly lever, L250, WAF 14	D00-10016-001
	44-piece set	D28-52000-710



Set also available with PPC bolts instead of PC bolts.

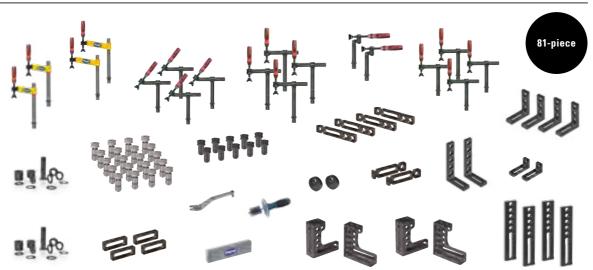
Set with PPC bolts → Item no. D28-52000-711

DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it is possible to use the accessories from the PROFIPI





#### **PROFIPIUSLINE set 720 D28**



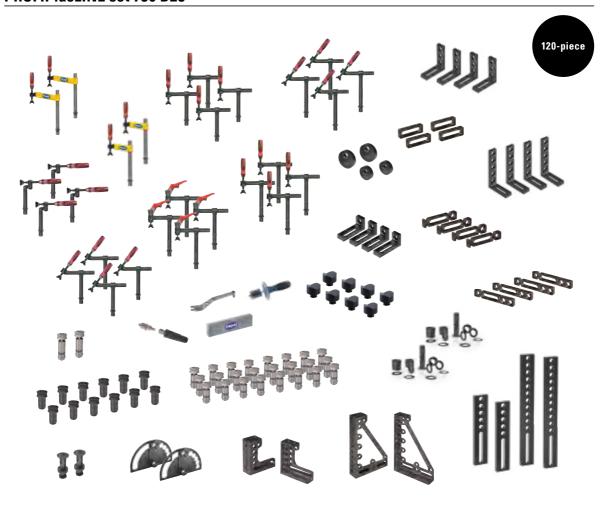
PROFIPIusI	.INE set 720 D28	D28
Quantity	Description	Item no.
4	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000
2	Locating and clamping angle D28 PL small, L175, bore/oblong hole	D28-03001-005
2	Locating and clamping angle D28 PL 300, right	PL28-03002-000
2	Locating and clamping angle D28 PL 300, left	PL28-03002-001
2	Locating and clamping angle D28 PL large, L275, bore/oblong hole	PE28-03008-000
2	Universal stop D28 large, L225, with four notches	D28-05001-000
4	Stop bar D28, L500	D28-05003-000
4	Universal stop D28 L300	D28-05009-000
2	Stop disc D28, Ø 100 mm	D28-05013-001
4	Sliding stop D28, L150	D28-05015-000
20	PC bolt D28, short, WAF 14	D28-06001-000
10	Stop and positioning bolt D28	D28-06009-000
2	Compensating screw clamp D28 150, L350, spindle	D28-07001-000
2	Compensating screw clamp D28 200, L350, spindle	D28-07002-000
4	Screw clamp 180° D28, L270, spindle	D28-07005-000
4	Screw clamp 180° D28, L350, spindle	D28-07005-014
2	Variable screw clamp 90° D28, L150, spindle	D28-07008-000
4	Variable screw clamp 45° D28, L270, spindle	D28-07009-000
2	11-piece support set D28, 5–100 mm	D28-09001-000
1	Round brush D28, splash guard	D28-10002-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Assembly lever, L250, WAF 14	D00-10016-001
	81-piece set	D28-52000-720



Set also available with PPC bolts instead of PC bolts.

Set with PPC bolts → Item no. D28-52000-721

#### **PROFIPIUSLINE set 730 D28**





Set with PPC bolts

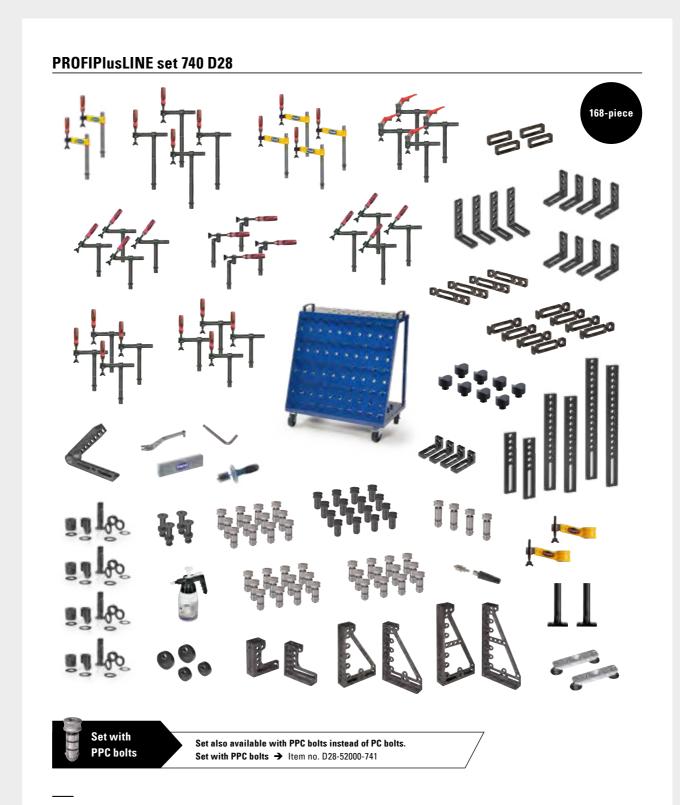
Set also available with PPC bolts instead of PC bolts. Set with PPC bolts  $\rightarrow$  Item no. D28-52000-731

DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it is possible to use the accessories from the PROFIPI





PROFIPIus!	.INE set 730 D28	D28
Quantity	Description	ltem no.
4	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000
4	Locating and clamping angle D28 PL small, L175, bore/oblong hole	D28-03001-005
1	Locating and clamping angle D28 PL 300, right	PL28-03002-000
1	Locating and clamping angle D28 PL 300, left	PL28-03002-001
1	Locating and clamping angle D28 PL 600, right	PL28-03003-000
1	Locating and clamping angle D28 PL 600, left	PL28-03003-001
4	Locating and clamping angle D28 PL large, L275, bore/oblong hole	PE28-03008-000
4	Universal stop D28 large, L225, with four notches	D28-05001-000
2	Stop bar D28, L500	D28-05003-000
2	Stop bar D28, L800	D28-05003-001
4	Universal stop D28 L300	D28-05009-000
2	Stop disc D28, Ø 75 mm	D28-05013-000
2	Stop disc D28, Ø 100 mm	D28-05013-001
2	Angle-setting template D28	D28-05013-010
4	Sliding stop D28, L150	D28-05015-000
24	PC bolt D28, short, WAF 14	D28-06001-000
2	PC bolt D28, long, WAF 14	D28-06002-000
12	Stop and positioning bolt D28	D28-06009-000
2	Compensating screw clamp D28 150, L350, spindle	D28-07001-000
2	Compensating screw clamp D28 200, L350, spindle	D28-07002-000
4	Screw clamp 180° D28, L270, spindle	D28-07005-000
4	Screw clamp 180° D28, L350, spindle	D28-07005-014
4	Screw clamp 180° D28, L350, quick-action clamping cylinder	D28-07005-015
4	Variable screw clamp 90° D28, L150, spindle	D28-07008-000
4	Variable screw clamp 45° D28, L270, spindle	D28-07009-000
4	Variable screw clamp 45° D28, L270, spindle	D28-07009-011
2	11-piece support set D28, 5–100 mm	D28-09001-000
2	Support set with thread D28, 22–105 mm, continuously variable	D28-09001-005
8	V-block holder D28, Ø 58 mm	D28-09003-000
1	Round brush D28, splash guard	D28-10002-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Earth connection D28/D22/D16	D00-10009-000
1	Assembly lever, L250, WAF 14	D00-10016-001
	120-piece set	D28-52000-730



DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIPremiumLINE set on a PROFIPIusLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.



PROFIPIus	LINE set 740 D28	D28
Quantity	Description	Item no.
8	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000
4	Locating and clamping angle D28 PL small, L175, bore/oblong hole	D28-03001-005
1	Locating and clamping angle D28 PL 300, right	PL28-03002-000
1	Locating and clamping angle D28 PL 300, left	PL28-03002-001
1	Locating and clamping angle D28 PL 600, right	PL28-03003-000
1	Locating and clamping angle D28 PL 600, left	PL28-03003-001
1	Locating and clamping angle D28 PL 800, right	PL28-03004-000
1	Locating and clamping angle D28 PL 800, left	PL28-03004-001
1	Universal pivot and tilt angle D28, right	D28-03007-000
4	Locating and clamping angle D28 PL large, L275, bore/oblong hole	PE28-03008-000
8	Universal stop D28 large, L225, with four notches	D28-05001-000
2	Stop bar D28, L500	D28-05003-000
2	Stop bar D28, L800	D28-05003-001
2	Stop bar D28, L1000	D28-05003-008
2	Multi-clamping and support tower D28, L 1000	D28-05006-000
2	Compensating clamping arm D28, short spindle	D28-05007-000
4	Universal stop D28 L300	D28-05009-000
2	Stop disc D28, Ø 75 mm	D28-05013-000
2	Stop disc D28, Ø 100 mm	D28-05013-001
4	Sliding stop D28, L150	D28-05015-000
36	PC bolt D28, short, WAF 14	D28-06001-000
4	PC bolt D28, long, WAF 14	D28-06002-000
16	Stop and positioning bolt D28	D28-06009-000
2	Compensating screw clamp D28 150, L350, spindle	D28-07001-000
4	Compensating screw clamp D28 200, L350, spindle	D28-07002-000
4	Screw clamp 180° D28, L270, spindle	D28-07005-000
4	Screw clamp 180° D28, L350, spindle	D28-07005-014
4	Screw clamp 180° D28, L350, quick-action clamping cylinder	D28-07005-015
4	Screw clamp 180° D28, L500, spindle	D28-07005-033
4	Variable screw clamp 90° D28, L150, spindle	D28-07008-000
4	Variable screw clamp 45° D28, L270, spindle	D28-07009-000
4	Variable screw clamp 45° D28, L270, spindle	D28-07009-011
2	2P. Clamping bridge D28 with two clamping pads, steel	D28-07018-000
4	11-piece support set D28, 5–100 mm	D28-09001-000
4	Support set with thread D28, 22–105 mm, continuously variable	D28-09001-005
8	V-block holder D28, Ø 58 mm	D28-09003-000
1	Round brush D28, splash guard	D28-10002-000
1	Pump bottle with 1 l of protective spray	D00-10005-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Hex key WAF 14, ball head	D28-10008-000
1	Earth connection D28/D22/D16	D00-10009-000
1	Assembly lever, L250, WAF 14	D00-10016-001
1	Accessory cart D28	D28-11001-000
	168-piece set	D28-52000-740



#### PROFIEcoLINE set 710 D28





PROFIEcoLINE set 710 D28		D28	
Quantity	Description	Item no.	
4	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000	
4	Universal stop D28 PE large, L225	E28-05001-000	
2	Universal stop D28 PE small, L100	E28-05002-000	
2	Stop disc D28, Ø 100 mm	D28-05013-001	
12	EcoLINE bolt D28, short, WAF 8	E28-06001-000	
6	Screw clamp 180° D28, L270, spindle	D28-07005-000	
1	Round brush D28, splash guard	D28-10002-000	
1	Hex key WAF 8, ball head	D28-10008-005	
	32-piece set	E28-52000-710	



Set also available with PC or PPC bolts instead of EcoLINE bolts:

Set with PC bolts¹: → Item no. E28-52000-711

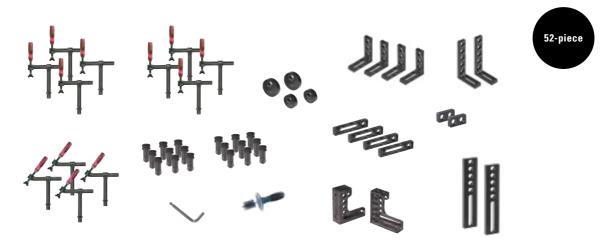
Set with PPC bolts²: → Item no. E28-52000-712

DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIEcoLINE set on a PROFIPIusLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.





#### PROFIEcoLINE set 720 D28



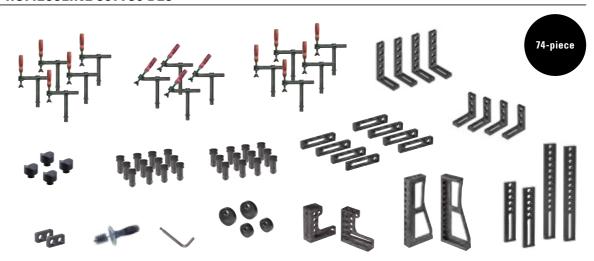
PROFIEcoLINE set 720 D28		D28	
Quantity	Description	Item no.	
4	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000	
1	Locating and clamping angle D28 PL 300, right	PL28-03002-000	
1	Locating and clamping angle D28 PL 300, left	PL28-03002-001	
2	Locating and clamping angle D28 PL large, L275, bore/oblong hole	PE28-03008-000	
4	Universal stop D28 PE large, L225	E28-05001-000	
2	Universal stop D28 PE small, L100	E28-05002-000	
2	Stop bar D28, L500	D28-05003-000	
2	Stop disc D28, Ø 75 mm	D28-05013-000	
2	Stop disc D28, Ø 100 mm	D28-05013-001	
18	EcoLINE bolt D28, short, WAF 8	E28-06001-000	
8	Screw clamp 180° D28, L270, spindle	D28-07005-000	
4	Variable screw clamp 45° D28, L270, spindle	D28-07009-000	
1	Round brush D28, splash guard	D28-10002-000	
1	Hex key WAF 8, ball head	D28-10008-005	
	52-piece set	E28-52000-720	



Set also available with PC or PPC bolts instead of EcoLINE bolts:

Set with PC holts¹: → Item no. E28-52000-721
Set with PPC bolts²: → Item no. E28-52000-722

#### PROFIEcoLINE set 730 D28



PROFIEcoLINE set 730 D28		D28
Quantity	Description	Item no.
4	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000
1	Locating and clamping angle D28 PL 300, right	PL28-03002-000
1	Locating and clamping angle D28 PL 300, left	PL28-03002-001
1	Locating and clamping angle D28 PE 600, right	PE28-03003-000
1	Locating and clamping angle D28 PE 600, left	PE28-03003-001
4	Locating and clamping angle D28 PL large, L275, bore/oblong hole	PE28-03008-000
8	Universal stop D28 PE large, L225	E28-05001-000
2	Universal stop D28 PE small, L100	E28-05002-000
2	Stop bar D28, L500	D28-05003-000
2	Stop bar D28, L800	D28-05003-001
2	Stop disc D28, Ø 75 mm	D28-05013-000
2	Stop disc D28, Ø 100 mm	D28-05013-001
24	EcoLINE bolt D28, short, WAF 8	E28-06001-000
10	Screw clamp 180° D28, L270, spindle	D28-07005-000
4	Variable screw clamp 45° D28, L270, spindle	D28-07009-000
4	V-block holder D28, Ø 58 mm	D28-09003-000
1	Round brush D28, splash guard	D28-10002-000
1	Hex key WAF 8, ball head	D28-10008-005
	74-piece set	E28-52000-730



Set also available with PC or PPC bolts instead of EcoLINE bolts:

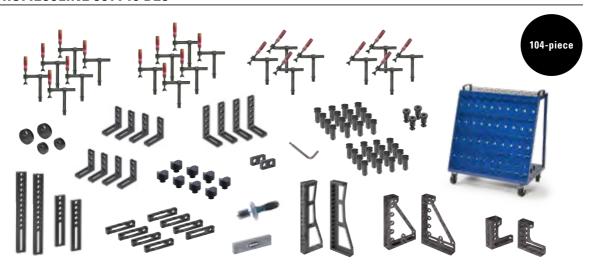
Set with PC bolts¹:  $\rightarrow$  Item no. E28-52000-731 Set with PPC bolts²:  $\rightarrow$  Item no. E28-52000-732

DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIEcoLINE set on a PROFIPIUSLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.





#### **PROFIEcoLINE set 740 D28**



PROFIEcoLINE set 740 D28		D28	
Quantity	Description	ltem no.	
8	Locating and clamping angle D28 PL, L175, bore/oblong hole	PE28-03001-000	
1	Locating and clamping angle D28 PL 300, right	PL28-03002-000	
1	Locating and clamping angle D28 PL 300, left	PL28-03002-001	
1	Locating and clamping angle D28 PL 600, right	PL28-03003-000	
1	Locating and clamping angle D28 PL 600, left	PL28-03003-001	
1	Locating and clamping angle D28 PE 800, right	PE28-03004-000	
1	Locating and clamping angle D28 PE 800, left	PE28-03004-001	
4	Locating and clamping angle D28 PL large, L275, bore/oblong hole	PE28-03008-000	
8	Universal stop D28 PE large, L225	E28-05001-000	
2	Universal stop D28 PE small, L100	E28-05002-000	
2	Stop bar D28, L500	D28-05003-000	
2	Stop bar D28, L800	D28-05003-001	
2	Stop disc D28, Ø 75 mm	D28-05013-000	
2	Stop disc D28, Ø 100 mm	D28-05013-001	
32	EcoLINE bolt D28, short, WAF 8	E28-06001-000	
4	Connecting bush D28, short, screw	D28-06003-000	
12	Screw clamp 180° D28, L270, spindle	D28-07005-000	
8	Variable screw clamp 45° D28, L270, spindle	D28-07009-000	
8	V-block holder D28, Ø 58 mm	D28-09003-000	
1	Round brush D28, splash guard	D28-10002-000	
1	Hex key WAF 8, ball head	D28-10008-005	
1	Bench stone, L200, two-sided rough/fine	D00-10007-000	
1	Accessory cart D28	D28-11001-000	
	104-piece set	E28-52000-740	



Set also available with PC or PPC bolts instead of EcoLINE bolts:

Set with PC bolts¹: → Item no. E28-52000-741
Set with PPC bolts²: → Item no. E28-52000-742

#### PROFIPIUSLINE set 710 D22





PROFIPIusLINE set 710 D22		D22
Quantity	Description	Item no.
4	Universal stop D22 large, L225, four notches	D22-05001-000
2	Universal stop D22 L300	D22-05009-000
4	Sliding stop D22, L150	D22-05015-000
10	EcoLINE bolt D22, short, WAF 6	E22-06025-000
4	Screw clamp 180° D22, L300, spindle	D22-07005-000
1	Round brush D22, splash guard	D22-10002-000
1	Assembly lever, L250, WAF 10	D22-10016-001
	26-piece set	D22-52000-710



Set also available with PPC bolts instead of EcoLINE bolts.

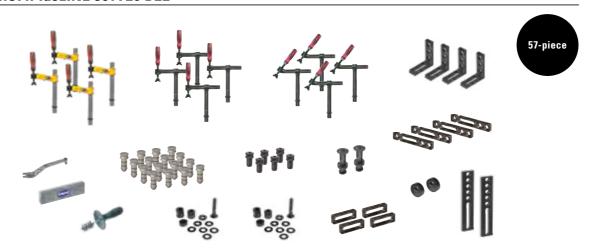
Set with PPC bolts → Item no. D22-52000-711

DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIPIusLINE set on a PROFIPremiumLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.





#### **PROFIPIUSLINE set 720 D22**



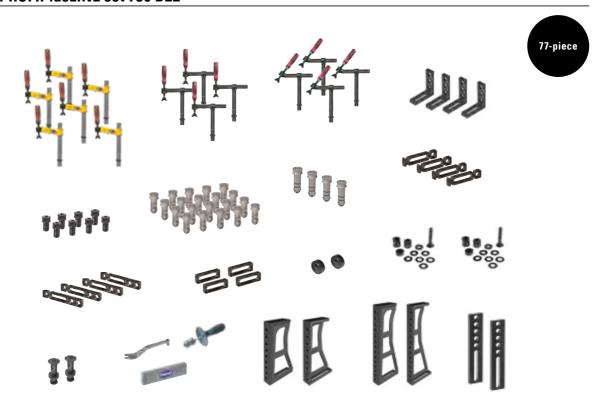
PROFIPIusLINE set 720 D22		D22	
Quantity	Description	Item no.	
4	Locating and clamping angle D22 PL, L175, bore/oblong hole	PE22-03001-000	
2	Stop bar D22, L500	D22-05003-000	
4	Universal stop D22 L300	D22-05009-000	
2	Stop disc D22, Ø 75 mm	D22-05013-000	
4	Sliding stop D22, L150	D22-05015-000	
6	Stop and positioning bolt D22	D22-06009-000	
16	EcoLINE bolt D22, short, WAF 6	E22-06025-000	
4	Compensating screw clamp D22, L300, spindle	D22-07001-000	
4	Screw clamp 180° D22, L300, spindle	D22-07005-000	
4	Variable screw clamp 45° D22, L300, spindle	D22-07009-000	
2	11-piece support set D22, 5–100 mm	D22-09001-000	
2	Support set with thread D22, 22–100 mm, continuously variable	D22-09001-005	
1	Round brush D22, splash guard	D22-10002-000	
1	Bench stone, L200, two-sided rough/fine	D00-10007-000	
1	Assembly lever, L250, WAF 10	D22-10016-001	
	57-piece set	D22-52000-720	



Set also available with PPC bolts instead of EcoLINE bolts.

Set with PPC bolts → Item no. D22-52000-721

#### PROFIPIUSLINE set 730 D22





Set also available with PPC bolts instead of EcoLINE bolts. Set with PPC bolts  $\rightarrow$  ltem no. D22-52000-731

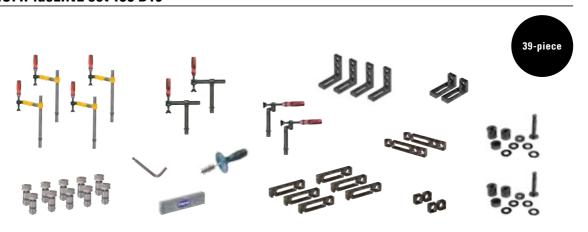
DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIPIusLINE set on a PROFIPremiumLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.





<b>PROFIPIus</b>	LINE set 730 D22	D22
Quantity	Description	Item no.
4	Locating and clamping angle D22 PL, L175, bore/oblong hole	PE22-03001-000
1	Locating and clamping angle D22 PE 500, right	PE22-03003-000
1	Locating and clamping angle D22 PE 500, left	PE22-03003-001
1	Locating and clamping angle D22 PE 750, right	PE22-03004-000
1	Locating and clamping angle D22 PE 750, left	PE22-03004-001
4	Universal stop D22 large, L225, four notches	D22-05001-000
2	Stop bar D22, L500	D22-05003-000
4	Universal stop D22 L300	D22-05009-000
2	Stop disc D22, Ø 75 mm	D22-05013-000
4	Sliding stop D22, L150	D22-05015-000
8	Stop and positioning bolt D22	D22-06009-000
20	EcoLINE bolt D22, short, WAF 6	E22-06025-000
4	EcoLINE bolt D22, long, WAF 6	E22-06026-000
6	Compensating screw clamp D22, L300, spindle	D22-07001-000
4	Screw clamp 180° D22, L300, spindle	D22-07005-000
4	Variable screw clamp 45° D22, L300, spindle	D22-07009-000
2	11-piece support set D22, 5–100 mm	D22-09001-000
2	Support set with thread D22, 22–100 mm, continuously variable	D22-09001-005
1	Round brush D22, splash guard	D22-10002-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Assembly lever, L250, WAF 10	D22-10016-001
	77-piece set	D22-52000-730

#### **PROFIPIUSLINE set 155 D16**



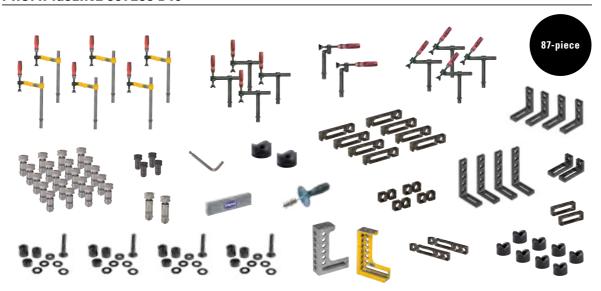
PROFIPIusLINE set 155 D16		D16	
Quantity	Description	ltem no.	
4	Locating and clamping angle D16 PL, L90, bore/oblong hole	D16-03001-000	
2	Locating and clamping angle D16 PL small, L90, bore/oblong hole	D16-03001-002	
6	Universal stop D16 large, L115, with two notches	D16-05001-004	
2	Universal stop D16 small, L55	D16-05002-000	
2	Universal stop D16 L165	D16-05009-000	
10	PC bolt D16, short, WAF 8	D16-06001-000	
4	Compensating screw clamp D16, L250, spindle	D16-07001-000	
2	Screw clamp 180° D16, L130, spindle	D16-07005-000	
2	Variable screw clamp 90° D16, L150, spindle	D16-07008-000	
2	9-piece support set D16, 5–50 mm	D16-09001-000	
1	Round brush D16, splash guard	D16-10002-000	
1	Bench stone, L200, two-sided rough/fine	D00-10007-000	
1	Hex key WAF 8, ball head	D16-10008-000	
	39-piece set	D16-52000-155	

DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it is possible to use the accessories from the PROFIPI



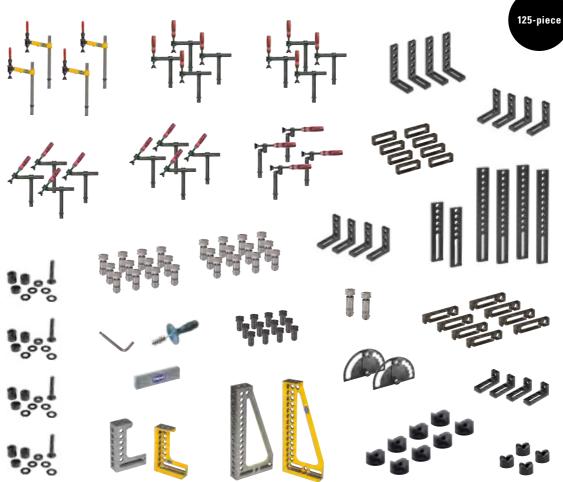


### PROFIPIUSLINE set 255 D16



<b>PROFIPIUSL</b>	INE set 255 D16	D16		
Quantity	Description	Item no.		
4	Locating and clamping angle D16 PL, L90, bore/oblong hole	D16-03001-000		
2	Locating and clamping angle D16 PL small, L90, bore/oblong hole	D16-03001-002		
1	Locating and clamping angle D16 PL 200, right	D16-03002-000		
1	Locating and clamping angle D16 PL 200, left	D16-03002-001		
4	Locating and clamping angle D16 PL large, L140, bore/oblong hole	D16-03008-000		
8	Universal stop D16 large, L115, with two notches	D16-05001-004		
4	Universal stop D16 small, L55	D16-05002-000		
2	Universal stop D16 L165	D16-05009-000		
2	Sliding stop, L150	D16-05015-000		
20	PC bolt D16, short, WAF 8	D16-06001-000		
2	PC bolt D16, long, WAF 8	D16-06002-000		
4	Stop and positioning bolt D16	D16-06009-000		
6	Compensating screw clamp D16, L250, spindle	D16-07001-000		
4	Screw clamp 180° D16, L130, spindle	D16-07005-000		
2	Variable screw clamp 90° D16, L150, spindle	D16-07008-000		
4	Variable screw clamp 45° D16, L130, spindle	D16-07009-000		
4	9-piece support set D16, 5–50 mm	D16-09001-000		
8	V-block holder D16, Ø 50 mm	D16-09004-000		
2	V-block holder D16, Ø 80 mm	D16-09003-000		
1	Round brush D16, splash guard	D16-10002-000		
1	Bench stone, L200, two-sided rough/fine	D00-10007-000		
1	Hex key WAF 8, ball head	D16-10008-000		
	87-piece set	D16-52000-255		

**PROFIPIUSLINE set 720 D16** 



 $\textbf{DEMMELER} \ welding \ and \ clamping \ systems \ are \ modular \ and \ flexible. \ All \ sets \ and \ accessories \ can \ be \ used \ on \ the \ 3D \ welding \ tables \ within$ the system sizes. For instance, it is possible to use the accessories from the PROFIPIUSLINE set on a PROFIECOLINE table without any hassle.  $What's \ more, you \ can \ individually \ assemble \ or \ add \ to \ your \ sets \ with \ the \ wide \ selection \ of \ DEMMELER \ accessories.$ 





PROFIPIUS	.INE set 720 D16	D16
Quantity	Description	ltem no.
8	Locating and clamping angle D16 PL, L90, bore/oblong hole	D16-03001-000
4	Locating and clamping angle D16 PL small, L90, bore/oblong hole	D16-03001-002
1	Locating and clamping angle D16 PL 200, right	D16-03002-000
1	Locating and clamping angle D16 PL 200, left	D16-03002-001
1	Locating and clamping angle D16 PL 400, right	D16-03003-000
1	Locating and clamping angle D16 PL 400, left	D16-03003-001
4	Locating and clamping angle D16 PL large, L140, bore/oblong hole	D16-03008-000
8	Universal stop D16 large, L115, two notches	D16-05001-004
2	Stop bar D16, L250	D16-05003-000
4	Stop bar D16, L400	D16-05003-001
2	Angle-setting template D16	D16-05013-010
8	Sliding stop, L150	D16-05015-000
24	PC bolt D16, short, WAF 8	D16-06001-000
2	PC bolt D16, long, WAF 8	D16-06002-000
12	Stop and positioning bolt D16	D16-06009-000
4	Compensating screw clamp D16, L250, quick-action clamping cylinder	D16-07001-001
8	Screw clamp 180° D16, L130, spindle	D16-07005-000
4	Variable screw clamp 90° D16, L150, spindle	D16-07008-000
8	Variable screw clamp 45° D16, L130, spindle	D16-07009-000
4	9-piece support set D16, 5–50 mm	D16-09001-000
4	V-block holder D16, Ø 50 mm	D16-09004-000
8	V-block holder D16, Ø 80 mm	D16-09003-000
1	Round brush D16, splash guard	D16-10002-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Hex key WAF 8, ball head	D16-10008-000
	125-piece set	D16-52000-720

# **PROFIPIUSLINE set 355 D16** 161-piece

DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it is possible to use the accessories from the PROFIPI





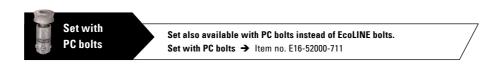
PROFIPIUSI	LINE set 355 D16	D16	
Quantity	Description	ltem no.	
12	Locating and clamping angle D16 PL, L90, bore/oblong hole	D16-03001-000	
4	Locating and clamping angle D16 PL small, L90, bore/oblong hole	D16-03001-002	
1	Locating and clamping angle D16 PL 200, right	D16-03002-000	
1	Locating and clamping angle D16 PL 200, left	D16-03002-001	
1	Locating and clamping angle D16 PL 600, right	D16-03004-000	
1	Locating and clamping angle D16 PL 600, left	D16-03004-001	
1	Support and clamping frame D16, L150, right	D16-03005-001	
1	Universal pivot and tilt angle D16, right	D16-03007-000	
4	Locating and clamping angle D16 PL large, L140, bore/oblong hole	D16-03008-000	
14	Universal stop D16 large, L115, with two notches	D16-05001-004	
4	Universal stop D16 small, L55	D16-05002-000	
4	Stop bar D16, L400	D16-05003-001	
6	Universal stop D16 L165	D16-05009-000	
6	Sliding stop, L150	D16-05015-000	
34	PC bolt D16, short, WAF 8	D16-06001-000	
4	PC bolt D16, long, WAF 8	D16-06002-000	
2	Connecting bush D16, short, screw, WAF 6	D16-06003-000	
4	PC countersunk bolt D16, short, WAF 4	D16-06004-000	
6	Stop and positioning bolt D16	D16-06009-000	
12	Compensating screw clamp D16, L250, spindle	D16-07001-000	
8	Screw clamp 180° D16, L130, spindle	D16-07005-000	
2	Variable screw clamp 90° D16, L150, spindle	D16-07008-000	
6	Variable screw clamp 45° D16, L130, spindle	D16-07009-000	
4	9-piece support set D16, 5–50 mm	D16-09001-000	
8	V-block holder D16, Ø 50 mm	D16-09004-000	
4	V-block holder D16, Ø 80 mm	D16-09003-000	
1	Adjusting spindle D16, L180, WAF 4	D16-09008-000	
1	Round brush D16, splash guard	D16-10002-000	
1	Bench stone, L200, two-sided rough/fine	D00-10007-000	
1	Hex key WAF 8, ball head	D16-10008-000	
1	Hex key WAF 6, ball head	D16-10008-001	
1	Hex key WAF 4, ball head	D16-10008-002	
1	Tool trolley D16	D16-11001-000	
	161-piece set	D16-52000-355	

### **PROFIEcoLINE set 710 D16**





PROFIEcoL	INE set 710 D16	D16
Quantity	Description	Item no.
4	Locating and clamping angle D16 PE, L90, bore/oblong hole	E16-03001-000
2	Locating and clamping angle D16 PE small, L90, bore/oblong hole	E16-03001-002
4	Universal stop D16 PE large, L115	E16-05001-000
2	Universal stop D16 PE small, L55	E16-05002-000
8	EcoLINE bolt D16, short, WAF 5	E16-06001-000
4	Screw clamp 180° D16, L130, spindle	D16-07005-000
2	Variable screw clamp 45° D16, L130, spindle	D16-07009-000
1	Round brush D16, splash guard	D16-10002-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Hex key WAF 5, ball head	E16-10008-000
	29-piece set	E16-52000-710

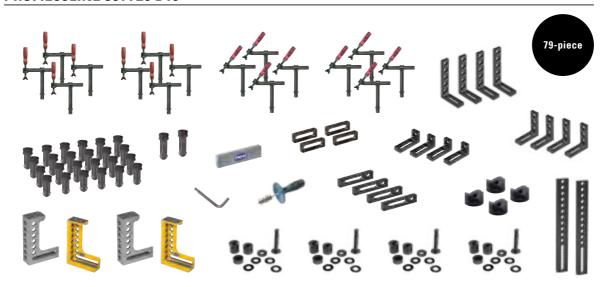


DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIEcoLINE set on a PROFIPIusLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.





### PROFIEcoLINE set 720 D16

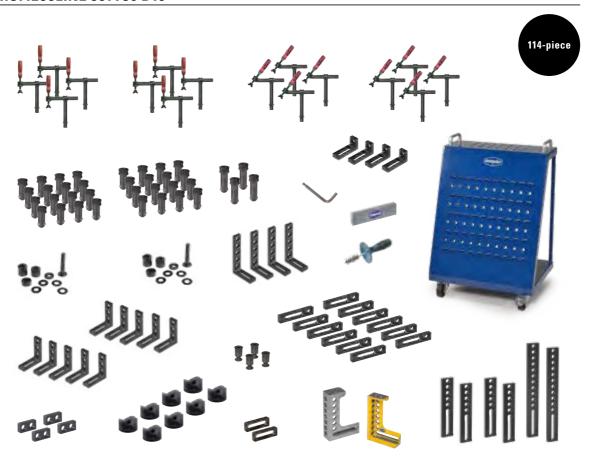


PROFIEcoLINE set 720 D16		D16
Quantity	Description	Item no.
4	Locating and clamping angle D16 PE, L90, bore/oblong hole	E16-03001-000
4	Locating and clamping angle D16 PE small, L90, bore/oblong hole	E16-03001-002
2	Locating and clamping angle D16 PL 200, right	D16-03002-000
2	Locating and clamping angle D16 PL 200, left	D16-03002-001
4	Locating and clamping angle D16 PL large, L140, bore/oblong hole	D16-03008-000
4	Universal stop D16 PE large, L115	E16-05001-000
2	Stop bar D16, L400	D16-05003-001
4	Sliding stop, L150	D16-05015-000
24	EcoLINE bolt D16, short, WAF 5	E16-06001-000
2	EcoLINE bolt D16, long, WAF 5	E16-06002-000
8	Screw clamp 180° D16, L130, spindle	D16-07005-000
8	Variable screw clamp 45° D16, L130, spindle	D16-07009-000
4	9-piece support set D16, 5–50 mm	D16-09001-000
4	V-block holder D16, Ø 80 mm	D16-09003-000
1	Round brush D16, splash guard	D16-10002-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Hex key WAF 5, ball head	E16-10008-000
	79-piece set	E16-52000-720



Set also available with PC bolts instead of EcoLINE bolts. Set with PC bolts  $\rightarrow$  Item no. E16-52000-721

### PROFIEcoLINE set 730 D16





Set also available with PC bolts instead of EcoLINE bolts. Set with PC bolts  $\rightarrow$  Item no. E16-52000-731

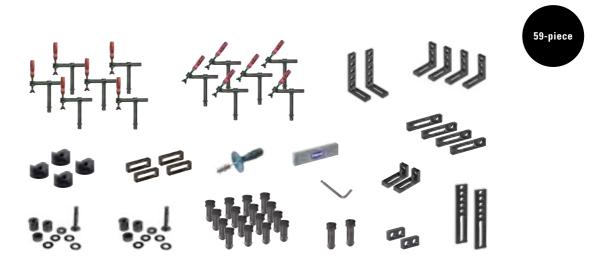
DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIEcoLINE set on a PROFIPIusLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.



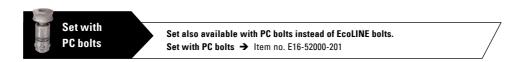


PROFIEcoL	INE set 730 D16	D16	
Quantity	Description	Item no.	
10	Locating and clamping angle D16 PE, L90, bore/oblong hole	E16-03001-000	
4	Locating and clamping angle D16 PE small, L90, bore/oblong hole	E16-03001-002	
1	Locating and clamping angle D16 PL 200, right	D16-03002-000	
1	Locating and clamping angle D16 PL 200, left	D16-03002-001	
4	Locating and clamping angle D16 PL large, L140, bore/oblong hole	D16-03008-000	
12	Universal stop D16 PE large, L115	E16-05001-000	
4	Universal stop D16 PE small, L55	E16-05002-000	
4	Stop bar D16, L250	D16-05003-000	
2	Stop bar D16, L400	D16-05003-001	
2	Sliding stop, L150	D16-05015-000	
32	EcoLINE bolt D16, short, WAF 5	E16-06001-000	
4	EcoLINE bolt D16, long, WAF 5	E16-06002-000	
4	Connecting bush D16, short, screw, WAF 6	D16-06003-000	
8	Screw clamp 180° D16, L130, spindle	D16-07005-000	
8	Variable screw clamp 45° D16, L130, spindle	D16-07009-000	
2	9-piece support set D16, 5–50 mm	D16-09001-000	
8	V-block holder D16, Ø 80 mm	D16-09003-000	
1	Round brush D16, splash guard	D16-10002-000	
1	Bench stone, L200, two-sided rough/fine	D00-10007-000	
1	Hex key WAF 5, ball head	E16-10008-000	
1	Accessory cart D16	D16-11001-002	
	114-piece set	E16-52000-730	

### **PROFIEcoLINE set 200 D16**



<b>PROFIEcoL</b>	D16	
Quantity	Description	Item no.
4	Locating and clamping angle D16 PE, L90, bore/oblong hole	E16-03001-000
2	Locating and clamping angle D16 PE small, L90, bore/oblong hole	E16-03001-002
2	Locating and clamping angle D16 PL large, L140, bore/oblong hole	D16-03008-000
4	Universal stop D16 PE large, L115	E16-05001-000
2	Universal stop D16 PE small, L55	E16-05002-000
2	Stop bar D16, L250	D16-05003-000
4	Sliding stop, L150	D16-05015-000
16	EcoLINE bolt D16, short, WAF 5	E16-06001-000
2	EcoLINE bolt D16, long, WAF 5	E16-06002-000
6	Screw clamp 180° D16, L130, spindle	D16-07005-000
6	Variable screw clamp 45° D16, L130, spindle	D16-07009-000
2	9-piece support set D16, 5–50 mm	D16-09001-000
4	V-block holder D16, Ø 80 mm	D16-09003-000
1	Round brush D16, splash guard	D16-10002-000
1	Bench stone, L200, two-sided rough/fine	D00-10007-000
1	Hex key WAF 5, ball head	E16-10008-000
	59-piece set	E16-52000-200

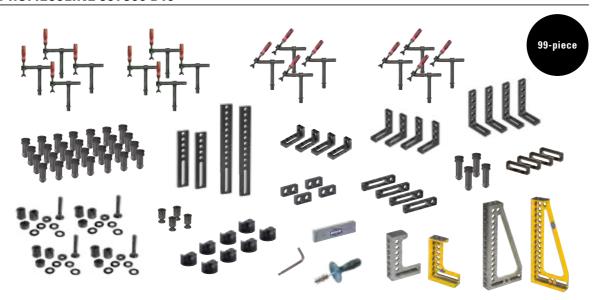


DEMMELER welding and clamping systems are modular and flexible. All sets and accessories can be used on the 3D welding tables within the system sizes. For instance, it's possible to use the accessories from the PROFIEcoLINE set on a PROFIPIusLINE table without any hassle. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELER accessories.





### PROFIEcoLINE set 300 D16



PROFIEcoL	INE set 300 D16	D16		
Quantity	Description	Item no.		
4	Locating and clamping angle D16 PE, L90, bore/oblong hole	E16-03001-000		
4	Locating and clamping angle D16 PE small, L90, bore/oblong hole	E16-03001-002		
1	Locating and clamping angle D16 PL 200, right	D16-03002-000		
1	Locating and clamping angle D16 PL 200, left	D16-03002-001		
1	Locating and clamping angle D16 PL 400, right	D16-03003-000		
1	Locating and clamping angle D16 PL 400, left	D16-03003-001		
4	Locating and clamping angle D16 PL large, L140, bore/oblong hole	D16-03008-000		
4	Universal stop D16 PE large, L115	E16-05001-000		
4	Universal stop D16 PE small, L55	E16-05002-000		
2	Stop bar D16, L250	D16-05003-000		
2	Stop bar D16, L400	D16-05003-001		
4	Sliding stop, L150	D16-05015-000		
28	EcoLINE bolt D16, short, WAF 5	E16-06001-000		
4	EcoLINE bolt D16, long, WAF 5	E16-06002-000		
4	Connecting bush D16, short, screw, WAF 6	D16-06003-000		
8	Screw clamp 180° D16, L130, spindle	D16-07005-000		
8	Variable screw clamp 45° D16, L130, spindle	D16-07009-000		
4	9-piece support set D16, 5–50 mm	D16-09001-000		
4	V-block holder D16, Ø 80 mm	D16-09003-000		
1	Round brush D16, splash guard	D16-10002-000		
1	Bench stone, L200, two-sided rough/fine	D00-10007-000		
1	Hex key WAF 5, ball head	E16-10008-000		
	99-piece set	E16-52000-300		



Set also available with PC bolts instead of EcoLINE bolts. Set with PC bolts  $\rightarrow$  Item no. E16-52000-301

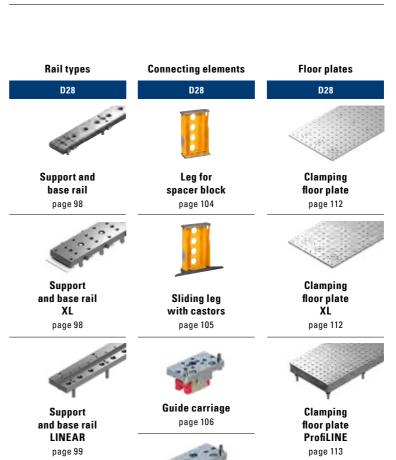






# **DEMMELER®** rail system

Product benefits	86
Planning and implementation	90
Overview of the rail system	92
Overview of connecting elements	96



Guide cartridge page 107

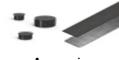


Base rail ROUND page 99





page 100



Accessories from page 100



# **DEMMELER** base rails – for when you have something big in mind!

Our flexible clamping system grows to meet your requirements. The modular structure of the base rail system offers you the greatest possible freedom for the production of larger than normal components. A grid system of any size adapted to your product range can be installed in your production hall. This provides you with a level installation surface over the entire area, including grid bores.









The highest quality thanks to optional laser measuring of your rail system.

### **Flexible**

Combine all system components in conjunction with your rail system.

Z

### Modular

A precise bore grid over long distances from A to Z. Reproduce the system accuracy on your workpieces.

The rail system is installed according to your requirements. Several options are available to you, for example overfloor or underfloor installation. The advantage of underfloor installation is that the entire work area around the rail system is accessible for persons and vehicles. This accessibility makes work easier, reduces the risk of accidents and thereby boosts safety and increases efficiency in your manufacturing process. You have access to the comprehensive selection of DEMMELER accessories to set up your clamping fixtures on the rail system.

### For projects that think outside the box

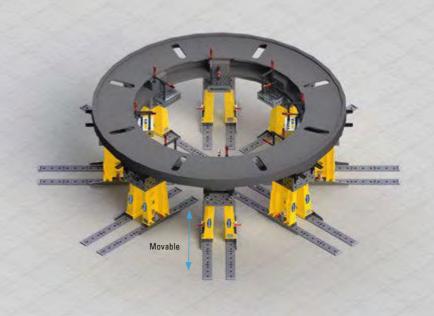
When you have big ambitions, like the company Liebherr, you need machinery to match. With the flexible base rail system, DEMMELER is the ideal partner for the world-renowned crane manufacturer. Thanks to modular extendibility, the base rail system is suitable for producing components with a length of 80 metres and more. The highest accuracy of fit is guaranteed thanks to minimal tolerances. This not only simplifies the hassle-free final assembly of the individual elements on the construction site, it also guarantees safe and smooth operation of the cranes.



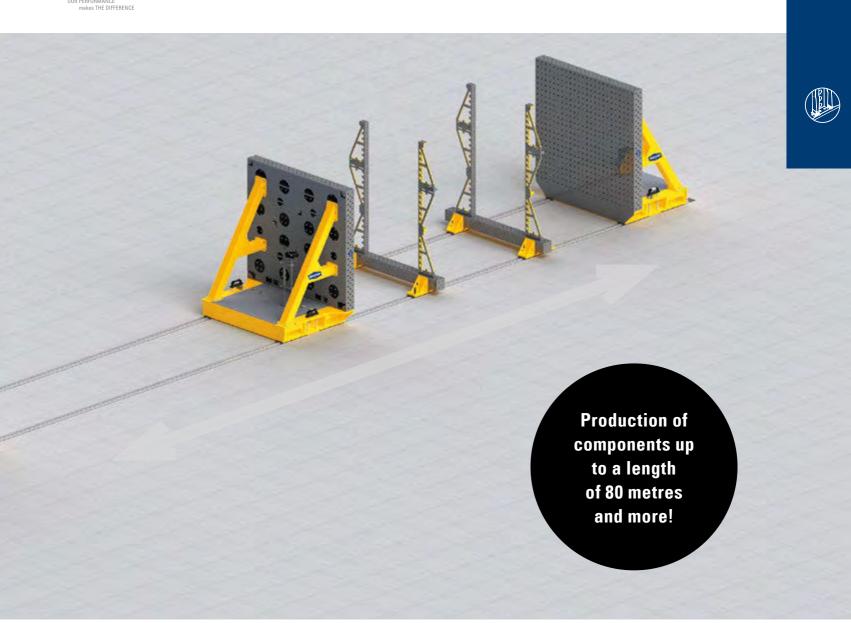
At the same time, using the sliding system reduces the set-up times for different component types. And with the comprehensive selection of accessories, countless fixtures can be created quickly and safely.

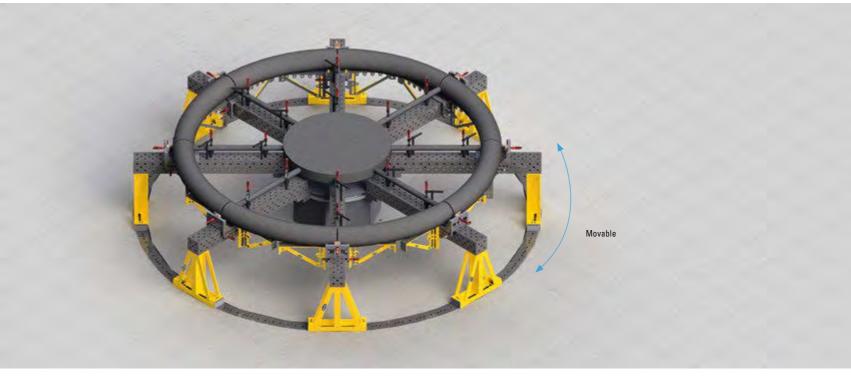
### To make things run smoothly

If your workpieces are round or circular, we have the right solution for you with the star-shaped arrangement of our modular rail system. Flexibly adapt the diameters of the clamping devices within the grid system.

















- Highly accurate templates are used for precise installation.
- We loan you an assembly set with templates free of charge if you choose to install the system yourself.
- Mounting materials (screw set, dowels and shims) are included in the scope of delivery for the support and base rails.
- As a rule of thumb, the installation time is about one hour per running metre.

### Measuring

The required accuracy is ensured as early as during installation with laser measuring tools.

### Acceptance

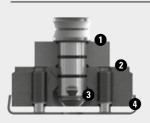
- Preparation of an acceptance report
- Handover to production
- Annual maintenance and inspections can be offered on request.





### Support and base rail

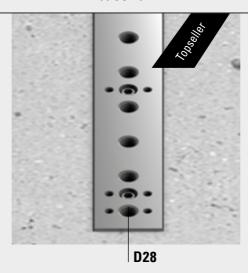
### Support and base rail XL



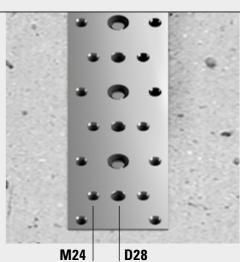
- 1 System component
- 2 Support and base rail
- 3 System bore
- 4 Shim



- 1 Set screw
- 2 Traction screw
- 3 Dowel









Area	of	application	

### Overfloor/underfloor

- A modular system grid can be set up over large distances
- Precise reference plane and clamping surfaces over the entire work area
- Precise positioning thanks to D28 bores in a 100 mm grid
- Suitable for all standard applications

### Overfloor/underfloor

- A modular system grid can be set up over very large distances
- Precise reference plane and clamping surfaces over the entire work area
- Precise positioning thanks to D28 bores and M24 threads in a 200 mm grid
- Suitable for very heavy-duty use and for all standard applications
- Bearing load approx. 80% higher than the standard support and base rail

Combination

**Description** 

All system components can be used thanks to the bore grid

D28 system bores every 100 mm

All system components can be used thanks to the bore grid

- D28 system bores every 200 mm
- M24 tapped holes every 200 mm

Grid

Cross-section approx. 120 x 40 mm For details, see page 98

Cross-section approx. 200 x 50 mm For details, see page 98

### **Dimensions**

- Use of sliding legs and connecting frames is possible
- System components and 3D welding tables can also be set up directly on the rail
- System components can easily be moved without using a crane thanks to sliding legs
- · Anchoring in the floor with dowel system
- Including screw set, dowels and shims
- Table leg can be used for spacer blocks and connecting frames
- System components and 3D welding tables can also be set up directly on the rail
- Anchoring in the floor with dowel system
- Including screw set, dowels and shims

Movement when loaded

**Special features** 

Table leg for spacer block, sliding leg, **Table leg versions** connecting frame, 3D welding table

Table leg for spacer block, sliding leg, connecting frame, 3D welding table

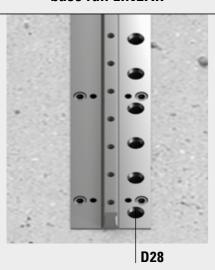


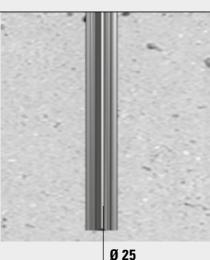
### Support and base rail LINEAR

### Base rail **ROUND**

### Support and base rail DUO















### Overfloor/underfloor

- · A modular system grid can be set up over
- Precise reference plane and clamping surfaces over the entire work area
- Set-up system components can even be moved when loaded
- . Set-up components can be set out in the system grid, enabling precise positioning

### Underfloor

- A movement range can be set up over very large distances
- Precise reference plane over the entire work area
- Set-up system components can even be moved when loaded
- Continuously variable positioning of set-up components
- Pinning bushings possible for positioning in end positions/work areas

### Underfloor

- A movement range can be set up over large distances
- Precise reference plane and clamping surfaces over the entire work area
- Set-up system components can even be moved when loaded
- Precise positioning thanks to D28 bores in a 100 mm grid
- · Continuously variable positioning of set-up

All system components can be used thanks to

System components can be set up indirectly using legs or frames

System components can be set up indirectly using legs or frames

the bore grid

- D28 system bores every 100 mm
- Continuous without bore grid
- D28 system bores every 100 mm · Also continuous without bore grid

- Cross-section approx. 160 x 40 mm
- For details, see page 99
- Cross-section approx. 50 x 50 mm For details, see page 99
- Cross-section approx. 120 x 40 mm base rail
- Cross-section approx. 50 x 50 mm, round rail For details, see page 100

- · Suitable for pallet changeover systems in robot installations, for example
- · Hardened and ground version of the profile guide
- Tip resistance thanks to wrap-around guide
- System components, including workpiece. can easily be moved without using a crane
- Anchoring in the floor with dowel system
- Including screw set, dowels and shims
- Suitable for pallet changeover systems in robot installations, for example
- · Hardened and ground version of the guide shaft
- System components, including workpiece, can easily be moved without using a crane
- · Anchoring in the floor by means of casting
- Installation flush with the floor, no trip hazards
- The scope of delivery includes installation templates

Movement possible when loaded.

- Suitable for pallet changeover systems in robot installations, for example
- Hardened and ground version of the guide shaft
- System components, including workpiece, can easily be moved without using a crane
- · Anchoring using dowel system Casting in the floor
- Including screw set, dowels and shims

### Movement possible when loaded.

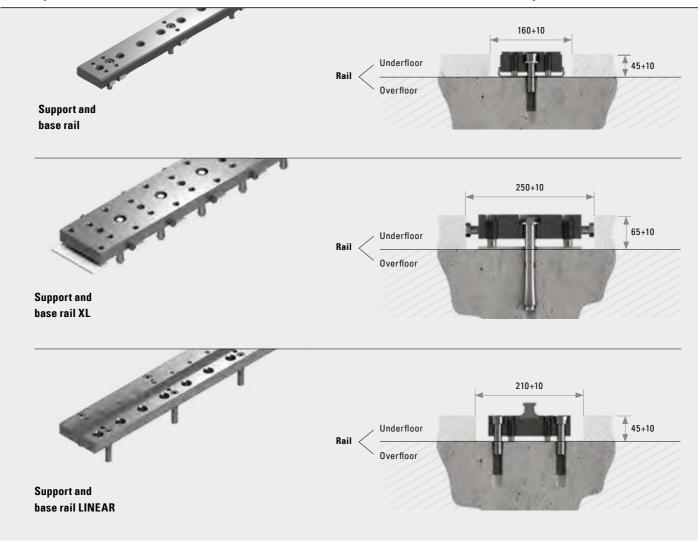
Guide carriage Guide cartridge

### Movement possible when loaded.

Table leg for spacer block, sliding leg, connecting frame, 3D welding table, guide cartridge

### Rail types v

### Installation types $\vee$



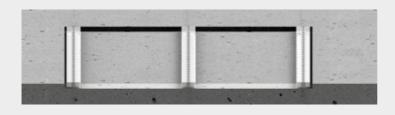


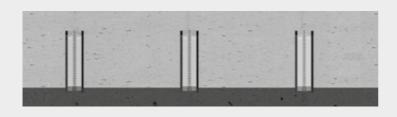


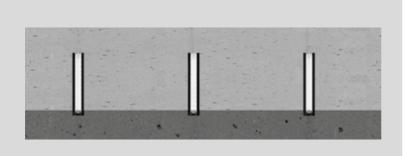


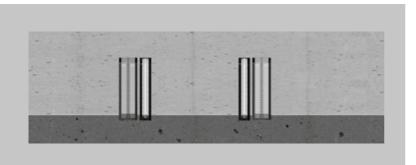
### Production facility floor versions v

# Standard track width 1000 1000

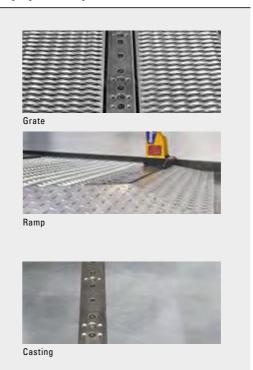








### Equipment options \* v



\* Equipment available options on request.

### **General information**

- Standard track width preferably 1000 mm.
   Customer-specific dimensions possible following consultation.
- The number of rails can be tailored to your requirements.
- Preferred lengths 3000 mm/6000 mm. Other lengths for the support and base rail are also available on request
- Base rails have to be closed with adhesive tape or cover plugs on the underside before casting to prevent the casting material from rising up into the system bores.
- Mounting materials such as the screw set, dowels and shims are included in the scope of delivery.
- Please observe internal safety guidelines for handling.
- Always secure the components to prevent tipping.
- Never walk under suspended loads.



### Legs you can build on.

DEMMELER provides a coordinated range for every task. In addition to an wide choice of tools, a diverse range of sophisticated system accessories is required to produce components on our rail system. Our leg versions tailored to the different rail types and requirements form a secure connection between the rail and 3D clamping system. Exchangeable table legs and sliding legs with castors, for example, enable rapid adaptation to new tasks. Multifunctional guide carriages can be moved to the required position quickly yet precisely.

### Rail types v

### Compatible leg versions as connecting elements $\vee$

		Leg for spacer block	Sliding leg	Connection frame	3D table/system components	Guide carriage	Guide cartridge
Support and base rail		•	•	•	•		
Support and base rail XL		•	•	•	•		
Support and passe rail LINEAR	4.5.4					•	
Base rail ROUND							•
Support and passe rail DUO		•	•	•	•		•



### Leg versions v





**Leg for spacer block** (description and sizes, page 104)



The set-up heights can be adapted to the workpiece by simply exchanging the legs.



Attachment to system components



Sliding leg with castors (description and sizes, page 105)



Set-up system components can be moved without using lifting



Roller



Tilt safety device



**Connecting frame** (description and sizes, page 49)



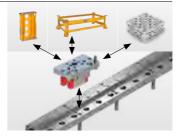
Set up in a lengthwise and crosswise direction.



Guide carriage (description and sizes, page 106)



Set-up system components can be moved even under load.

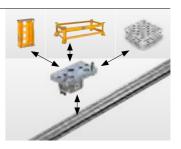




Guide cartridge (description and sizes, page 107)

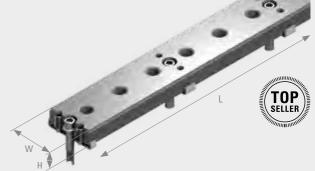


 ${\bf Set\text{-}up\ system\ components\ can\ be\ moved\ even\ under\ load}.$ 



### Support and base rail

- A modular system grid can be set up over large distances
- Precise reference plane and clamping surfaces over the entire work area
- Precise positioning thanks to D28 bores in a 100 mm grid
- · Suitable for all standard applications
- . Screw set, dowels and shims are included in the scope of delivery
- . Bearing load per metre up to 16 t
- Permissible tensile load in crack-free concrete 1.0 t per dowel



### Support and base rail



l				D28
L in mm	W in mm	H in mm approx.	Approx. weight in kg	Item no.
1000	120	40	35	D28-02003-067
2000	120	40	70	D28-02003-068
3000*	120	40	105	D28-02003-069
4000	120	40	140	D28-02003-070
5000	120	40	175	D28-02003-071
6000*	120	40	210	D28-02003-072

\*Preferred lengths/other lengths available on request.









Connecting elements for support and base rail:

 $Table\ leg\ for\ spacer\ block,\ sliding\ leg,\ connecting\ frame,\ 3D\ welding\ table.\ Also\ see\ page\ 104\ onwards.$ 

### Support and base rail XL

- A modular system grid can be set up over very large distances
- Precise reference plane and clamping surfaces over the entire work area
- Precise positioning thanks to D28 bores in a 200 mm grid
- Suitable for very heavy-duty use and all standard applications
- . Screw set, dowels and shims are included in the scope of delivery
- Bearing load per metre up to 30 t
- Bearing load approx. 80% higher than the standard support and base rail
- Permissible tensile load in crack-free concrete 1.8 t per dowel



## Support and base rail X Li 30

II AL	DZ8			
L in mm	W in mm	H in mm approx.	Approx. weight in kg	Item no.
3000	200	50	230	P28-02003-000
6000	200	50	460	P28-02003-001

Other lengths available on request.







Connecti Table led

Connecting elements for support and base rail XL:

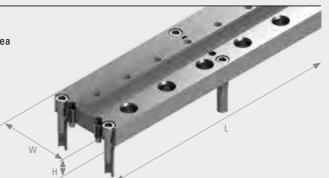
Table leg for spacer block, sliding leg, connecting frame, 3D welding table. Also see page 104 onwards.





### Support and base rail LINEAR

- A modular system grid can be set up over large distances
- Precise reference plane and clamping surfaces over the entire work area
- The set-up system components can even be moved when loaded
- · Tip resistance thanks to integrated wrap-around guide
- · Hardened and ground version of the profile guide
- Set-up components can be set out in the system grid, enabling precise positioning
- · Screw set, dowels and shims are included in the scope of delivery
- Bearing load per metre up to 16 t
- Permissible tensile load in crack-free concrete 1.0 t per dowel



Support and base rai	П
2000	ļ
	3
No.	(

II LINEAR	D28			
L in mm	W in mm	H in mm approx.	Approx. weight in kg	Item no.
3000	160	40	135	D28-02007-000
6000	160	40	270	D28-02007-001

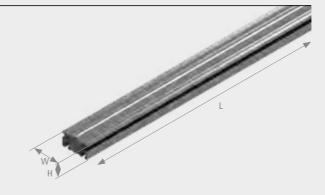
Other lengths available on request.



Connecting element for support and base rail LINEAR: Guide carriage. Also see page 106 onwards.

### **Base rail ROUND**

- A movement range can be set up over large distances
- Precise reference plane over the entire work area
- The set-up system components can even be moved when loaded
- Continuously variable positioning of set-up components
- · Ideal for pallet changeover systems
- Pinning bushings for positioning in end positions/work areas, can be integrated into the floor
- . Bearing load per metre up to 10 t



### Base rail ROUND



				DZU
L in mm	W in mm	H in mm approx.	Approx. weight in kg	Item no.
1000	54	48	8	D28-02008-000
2000	54	48	16	D28-02008-001
3000	54	48	24	D28-02008-002

Other lengths available on request.

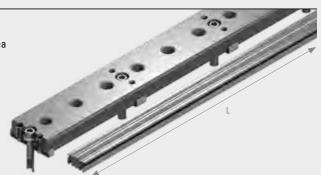


Connecting element for base rail ROUND: Guide cartridge. Also see page 107 onwards.



### Support and base rail DUO

- A movement range can be set up over large distances
- Precise reference plane and clamping surfaces over the entire work area
- The set-up system components can even be moved when loaded
- Precise positioning thanks to D28 bores in a 100 mm grid
- Continuously variable positioning of set-up components
- . Screw set, dowels and shims are included in the scope of delivery
- Bearing load per metre up to 20 t (depending on the number of guide cartridges)
- Permissible tensile load in crack-free concrete 1.0 t per dowel



Support and base rail DUO			D28
220	L in mm	Description	Item no.
	3000		D28-02003-069 + D28-02008-002
63/1	6000	2 units	D28-02003-072 + D28-02008-002

Other lengths available on request.











Connecting elements for support and base rail DUO: Table leg for spacer block, sliding leg, connecting frame, 3D welding table, guide cartridge. Also see page 104 onwards.

### Protecting the system bores against dirt Fine-grooved rubber mat/cover plate · Protects the system bores against dirt Fine-grooved rubber mat L in mm Item no. 1000 00092901 Cover plate L in mm Item no. 1000 00092904



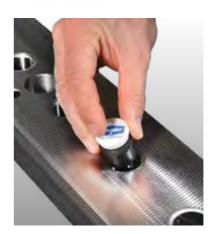


### Plug/cap/magnet

- Protects the system bores against dirt
- Easy to remove with the D28-10003-002 magnet



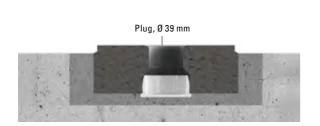
Plug		D28
	Description	ltem no.
	Plug D28	D28-10003-006
	10x plugs D28	D28-10003-007
	Plug, Ø 39 mm	00092929
	Plug M24	00068955

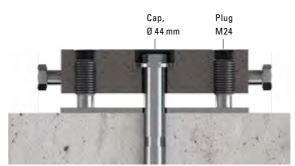


	D28
Description	ltem no.
Cap, Ø 44 mm	00023584
	·

Magnet		D28
	Description	Item no.
Stamps in	Magnet for plug D28, Ø 32 mm	D28-10003-002

### Example applications: Plug/cap





# Put your clamping system on the right track with the compatible legs

To be used on the rail system, the 3D welding tables must have additional bores on the underside for mounting the leg versions. For this reason, please choose your 3D welding table with the corresponding item no. from the table below.

### PROFIPremiumLINE (PP)



		SOLID	Hardened DEMONT 760 M	Hardened DEMONT 890 M
L x W in mm	H in mm	Item no.	Item no.	Item no.
1000 x 1000	200	PP28-01001-007	PP28-01001-017	PP28-01001-027
1200 x 1200	200	PP28-01056-007	PP28-01056-017	PP28-01056-027
1500 x 1000	200	PP28-01011-007	PP28-01011-017	PP28-01011-027
1500 x 1500	200	PP28-01031-007	PP28-01031-017	PP28-01031-027
2000 x 1000	200	PP28-01002-007	PP28-01002-017	PP28-01002-027
2000 x 2000	200	PP28-01006-007	PP28-01006-017	PP28-01006-027
2400 x 1200	200	PP28-01003-007	PP28-01003-017	PP28-01003-027
3000 x 1500	200	PP28-01004-007	PP28-01004-017	PP28-01004-027
1000 x 2000	200	PP28-01005-007	PP28-01005-017	PP28-01005-027
1800 x 2400	200	PP28-11085-007	PP28-11085-017	PP28-11085-027

### **PROFIPIUSLINE (PL)**



		SOLID	Hardened DEMONT 760 M	Hardened DEMONT 890 M
L x W in mm	H in mm	Item no.	Item no.	Item no.
1000 x 1000	200	PL28-01001-007	PL28-01001-017	PL28-01001-027
1200 x 1200	200	PL28-01056-007	PL28-01056-017	PL28-01056-027
1500 x 1000	200	PL28-01011-007	PL28-01011-017	PL28-01011-027
1500 x 1500	200	PL28-01031-007	PL28-01031-017	PL28-01031-027
2000 x 1000	200	PL28-01002-007	PL28-01002-017	PL28-01002-027
2000 x 2000	200	PL28-01006-007	PL28-01006-017	PL28-01006-027
2400 x 1200	200	PL28-01003-007	PL28-01003-017	PL28-01003-027
3000 x 1500	200	PL28-01004-007	PL28-01004-017	PL28-01004-027
4000 x 2000	200	PL28-01005-007	PL28-01005-017	PL28-01005-027
4800 x 2400	200	PL28-11085-007	PL28-11085-017	PL28-11085-027

### PROFIEcoLINE (PE)



		SOLID	Hardened DEMONT 760 M	Hardened DEMONT 890 M
L x W in mm	H in mm	Item no.	Item no.	Item no.
1000 x 1000	200	PE28-01001-007	PE28-01001-017	PE28-01001-027
1200 x 1200	200	PE28-01056-007	PE28-01056-017	PE28-01056-027
1500 x 1000	200	PE28-01011-007	PE28-01011-017	PE28-01011-027
1500 x 1500	200	PE28-01031-007	PE28-01031-017	PE28-01031-027
2000 x 1000	200	PE28-01002-007	PE28-01002-017	PE28-01002-027
2000 x 2000	200	PE28-01006-007	PE28-01006-017	PE28-01006-027
2400 x 1200	200	PE28-01003-007	PE28-01003-017	PE28-01003-027
3000 x 1500	200	PE28-01004-007	PE28-01004-017	PE28-01004-027
4000 x 2000	200	PE28-01005-007	PE28-01005-017	PE28-01005-027
4800 x 2400	200	PE28-11085-007	PE28-11085-017	PE28-11085-027











Ordering example:

**A** From page 102, select the required worktop, which results in order item **A**:

**B** From this page, select the leg you want in the corresponding quantity, which results in order item **B**:

**C** The two order item numbers make up your order from DEMMELER.

e.g. 1x PL28-01002-007

e.g. 4x D00-10017-000

e.g. 1x PL28-01002-007 (A)

e.g. 4x D00-10017-000(B)



Connectin	D28			
For table sizes	Connecting frame size	Weight in kg	Max. load in kg	ltem no.
1000 x 1000				
1200 x 1200	1000 x 1000 x 600	150	15000	DI 00 02004 000
1500 x 1000	1000 X 1000 X 600	158	15000	PL00-02004-000
1500 x 1500				
2000 x 1000				
2000 x 2000				
2400 x 1200	2000 x 1000 x 600	229	15000	PL00-02004-001
3000 x 1500				
4000 x 2000				
4000 x 2000	4000 × 2000 × 600	E16	20000	DI 00 02004 002
4800 x 2400	4000 x 2000 x 600	516	20000	PL00-02004-002



Leg for	D28				
Leg width	Leg height	Number of legs	Weight in kg per leg	Max. load in kg per leg	Item no.
200	200	4	14	3500	D00-10017-000
200	400	4	19	3500	D00-10017-001
200	600	4	24	3500	D00-10017-002
400	200	4	24	3500	D00-10017-010
400	400	4	33	3500	D00-10017-011
400	600	4	41	3500	D00-10017-012



<u>Sliding</u>	D28				
Leg width	Leg height	Number of legs	Weight in kg per leg	Max. load in kg per leg	Item no.
200	200	4	18	3500	D00-10017-025
200	400	4	24	3500	D00-10017-026
200	600	4	29	3500	D00-10017-027
400	200	4	33	3500	D00-10017-028
400	400	4	41	3500	D00-10017-029
400	600	4	50	3500	D00-10017-030

### Leg for spacer block

- Connecting element between U-shaped spacer block or 3D welding table and support and base rail
- Different set-up heights can be adapted to the workpiece by simply exchanging the table leas
- Includes 2x fitted shoulder screws M12–16 H8 x 30 for attachment to system components





Leg for spacer block



				D28
Leg width	Leg height	Weight	Max. load	Item no.
		in kg per leg	in kg per leg	
200	200	14	3500	D00-10017-000
200	400	19	3500	D00-10017-001
200	600	22	3500	D00-10017-002
400	200	22	3500	D00-10017-010
400	400	33	3500	D00-10017-011
400	600	41	3500	D00-10017-012

 $Other\ heights\ available\ on\ request.\ Observe\ internal\ safety\ guidelines\ when\ moving\ the\ system\ components.$ 

Leg sizes:













Compatible with the following rail types: Support and base rail, support and base rail XL and DUO. Also see page 98 onwards.





### System components are easy to move — with the patented DEMMELER® sliding legs with castors



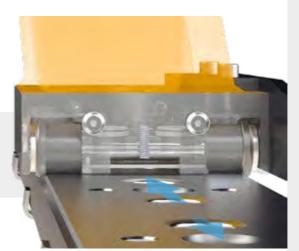
The castors of the patented DEMMELER® sliding legs lower when loaded. This means that the leg is in contact with the base rail across its entire surface. The welding current is not conducted by the rollers, preventing damage to the bearing.



Setting out and clamping = working position



Spring-loaded lift
= movement position
(mounted on roller bearings so as to be movable)



### Sliding leg with castors

- Set-up system components can be moved without using lifting equipment or a crane
- Different set-up heights can be adapted to the workpiece by simply exchanging the table legs
- Highest load capacity in the working position because the leg is supported over its entire surface on the rail
- Tilt safety device is included in the scope of delivery
- Includes 2x fitted shoulder screws M12–16 H8 x 30 for attachment to system components
- Ensure stability when moving system components



### **Sliding leg with castors**



1013				DEU
Leg width	Leg height	Weight	Max. load	Item no.
		in kg per leg	in kg per leg*	
200	200	18	3500	D00-10017-025
200	400	24	3500	D00-10017-026
200	600	29	3500	D00-10017-027
400	200	33	3500	D00-10017-028
400	400	41	3500	D00-10017-029
400	600	50	3500	D00-10017-030

Other heights available on request. Observe internal safety guidelines when moving the system components. \*Specified load in working position.





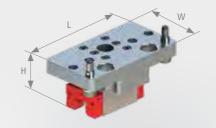


Compatible with the support and base rail. See also page 98.



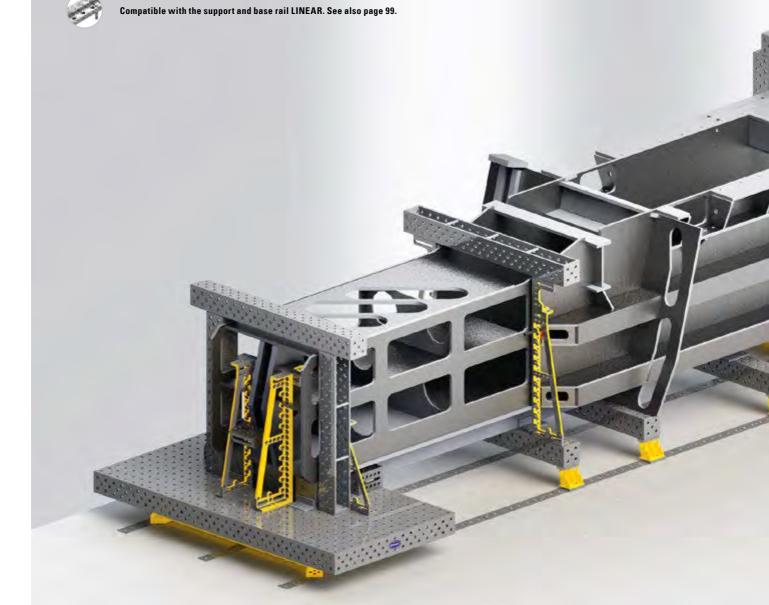
### **Guide carriage**

- Secured to prevent tipping thanks to wrap-around profile rail guide
- Scraper prevents accumulation of dirt on the rolling elements
- Cladding plate is included in the scope of delivery
- Movement possible when loaded



Guide carriage						D28
	L in mm	W in mm	H in mm	Max. load in kg per	guide carriage	Item no.
				Static	Dynamic	
	200	110	100	8440	3870	D28-10018-000
-	400	110	100	16880	7740	D28-10018-001

Observe internal safety guidelines when moving the system components.





### **Guide cartridge**

- Extremely smooth-running thanks to ball bearings
- Roller in hardened version
- High bearing load thanks to robust design
- Cladding plates are included in the scope of delivery
- Ensure stability when moving system components
- Movement possible when loaded



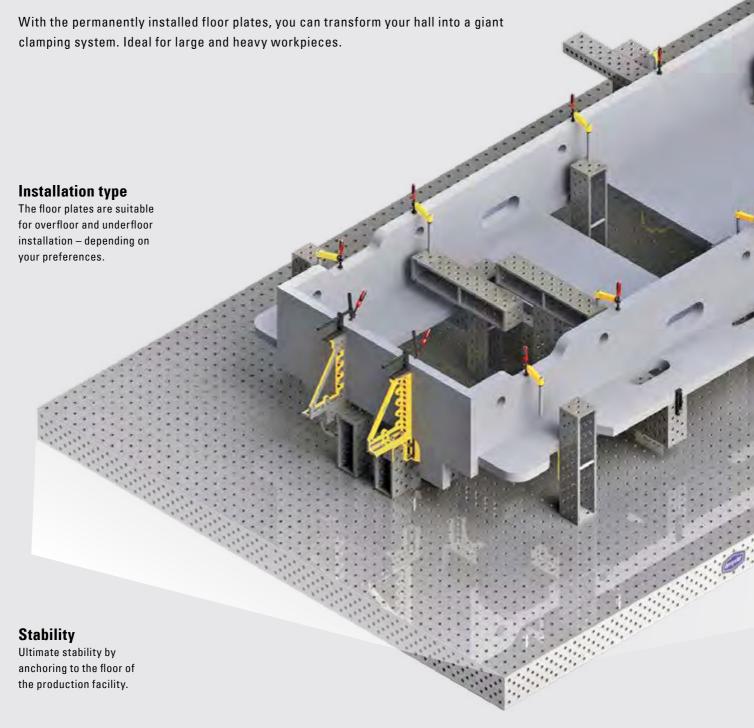
Guide cartridge					D28
	L in mm	W in mm	H in mm	Max. load in kg per guide cartridge	ltem no.
1	200	110	100	1640	D28-10019-000
Marie .	400	110	100	3280	D28-10019-001

Observe internal safety guidelines when moving the system components.

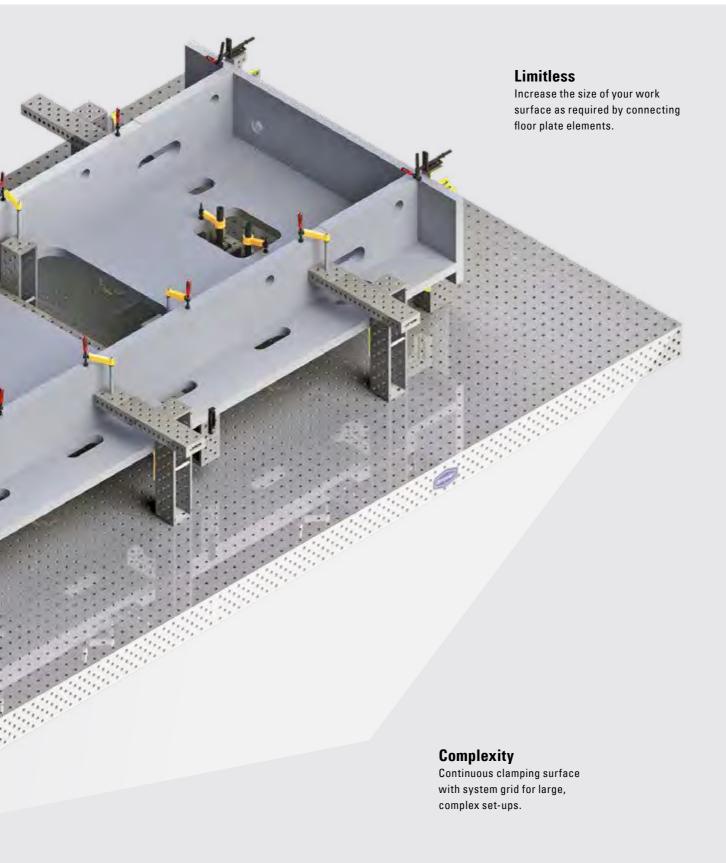




# **Equipping the floor of the production facility for clamping**

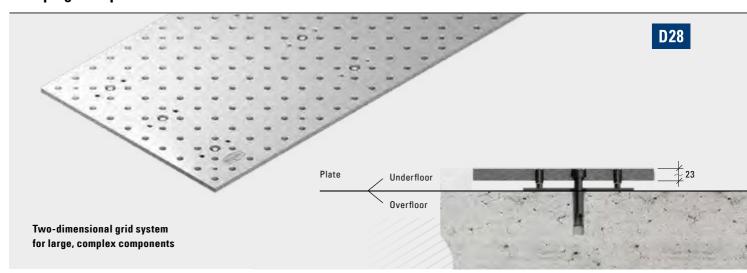




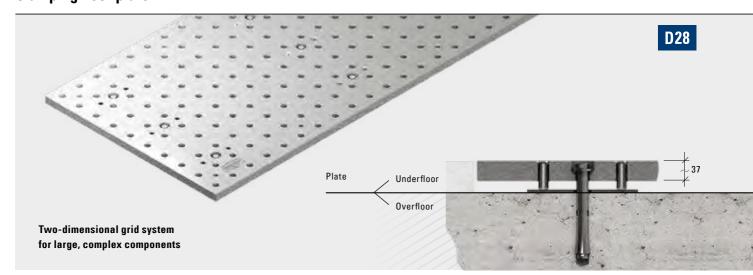




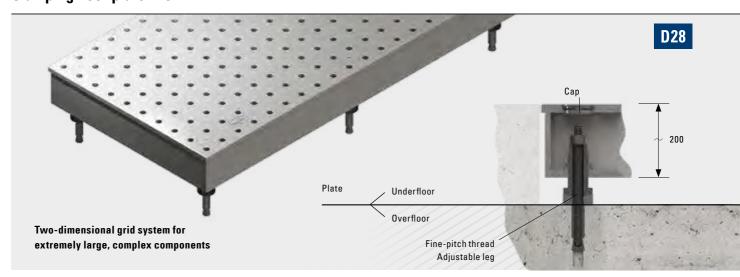
### Clamping floor plate v



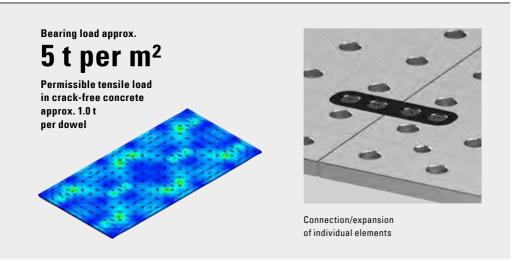
### Clamping floor plate XL $\vee$

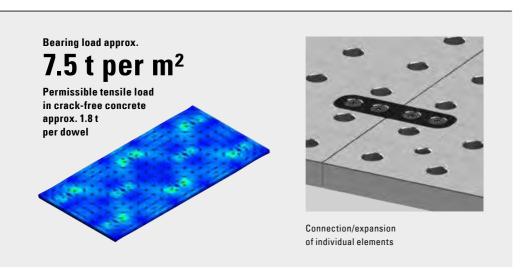


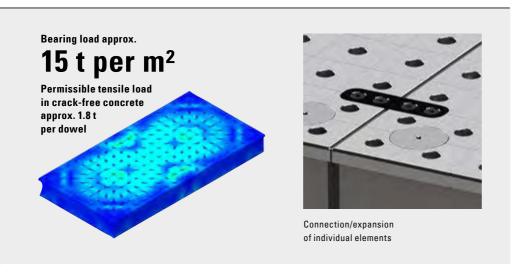
### Clamping floor plate ProfiLINE v







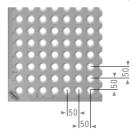




### Grid options v

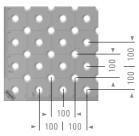
Various grid types are optionally possible

### PROFIPremiumLINE (PP)



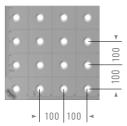
Worktop with D28 system bores in a 50 x 50 mm grid

### PROFIPIusLINE (PL)



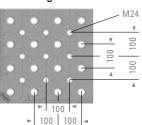
Worktop with D28 system bores in a 100 x 100 mm double grid

### PROFIEcoLINE (PE)



Worktop with D28 system bores in a  $100 \times 100 \text{ mm}$  grid

### PL-M24 grid

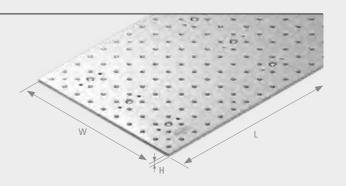


Worktop with D28 system bores in a 100 x 100 mm grid and additional M24 bores in a 100 x 100 mm grid



### **Clamping floor plate**

- A modular system grid can be set up over large distances
- Precise reference plane and clamping surfaces over the entire work area
- Precise positioning thanks to D28 bores in a 100 mm grid
- · Suitable for all standard applications
- . Screw set, dowels and shims are included in the scope of delivery
- Bearing load per metre up to 16 t/bearing load approx. 5 t per m<sup>2</sup>
- Permissible tensile load in crack-free concrete 1.0 t per dowel
- You can find further details on page 110



### **Clamping floor plate**

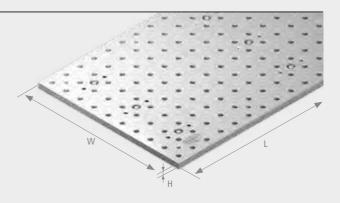


			D28	
L in mm	W in mm	H in mm approx.	ltem no.	
1000	1000	23	D28-02010-000	
1200	1200	23	D28-02010-001	
1500	1000	23	D28-02010-002	
1500	1500	23	D28-02010-003	
2000	1000	23	D28-02010-004	
2400	1200	23	D28-02010-005	
3000	1500	23	D28-02010-006	
4000	2000	23	D28-02010-007	

Other sizes available on request.

### **Clamping floor plate XL**

- Two-dimensional grid system for large, complex components
- Various grid types are optionally possible
- Includes screw set, dowels and shims
- 100 x 100 mm grid, D28 system bores
- Bearing load approx. 7.5 t per m²
- Permissible tensile load in crack-free concrete approx. 1.8 t per dowel
- You can find further details on page 110



### Clamping floor plate XL



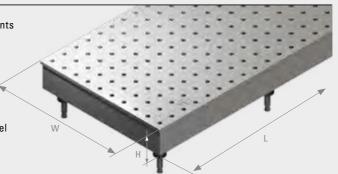
XL			D28
L in mm	W in mm	H in mm approx.	Item no.
1000	1000	37	D28-02011-000
1200	1200	37	D28-02011-001
1500	1000	37	D28-02011-002
1500	1500	37	D28-02011-003
2000	1000	37	D28-02011-004
2400	1200	37	D28-02011-005
3000	1500	37	D28-02011-006
4000	2000	37	D28-02011-007

Other sizes available on request.



### **Clamping floor plate ProfiLINE**

- Two-dimensional grid system for extremely large, complex components
- Various grid types are optionally possible
- · Can be extended as required
- Includes screw set, dowels and washers
- Fine-pitch thread adjusts legs for precise levelling
- Bearing load approx. 15 tonnes per m²
- 100 x 100 mm grid, D28 system bores
- Permissible tensile load in crack-free concrete approx. 1.8 t per dowel
- You can find further details on page 110



### Clamping floor plate ProfiLINE



ProfiLINE			D28	
L in mm	W in mm	H in mm approx.	ltem no.	
1000	1000	200	D28-02012-000	
1200	1200	200	D28-02012-001	
1500	1000	200	D28-02012-002	
1500	1500	200	D28-02012-003	
2000	1000	200	D28-02012-004	
2400	1200	200	D28-02012-005	
3000	1500	200	D28-02012-006	
4000	2000	200	D28-02012-007	
-				

Other sizes available on request.











## **DEMMELER®** bolts

Overview of clamping bolts 116 Product benefits of PPC bolts 118





Adapter page 129



Interface plates page 129



Adapter page 129



Interface plates page 129

















	PPC bolt	PPC countersunk bolt	PC bolt	PC countersunk bolt
System sizes	D28 D22	D28 D22	D28 D16	D28 D16
Version	Short/long	Short/long	Short/long	Short/long
Use	Reliable fixing of workpieces with system components or on the welding table in a way that reduces material wear	Space-saving connecting element that reduces material wear for all system components on tables, perforated plates, etc.	Reliable fixing of workpieces with system components or on the welding table in a way that reduces material wear	Space-saving connecting element for all system components on tables, perforated plates, etc.

**Short version** = connecting two system components together or one system component on the welding table **Long version** = connecting three system components together or two system components on the welding table





### Clamping principles



### PPC bolt

- Even force distribution across the polygonal bolts reduces bore wear
- Highest clamping force with large clamping stroke



### PC bolt

- Clamping ball are in point contact with the bevel
- Highest clamping force with large clamping stroke



### EcoLINE bolt

- Clamping ball are in point contact with the bevel
- Without clamping area









	EcoLINE bolt	Stop and positioning bolt	Connecting bushes with bolt	Connecting bush with collar
System sizes	D28 D22 D16	D28 D22 D16	D28 D22 D16	D28 D16
Version	Short/long	Short/long	Short/long	Short
Use	Connecting element for all system components	For setting out the system components, to fix them in position and as an adapter for D16 screw clamps	Use as a long-term connection for joining all system components or welding tables	Long-term connection for joining two system components (suitable for system bore/oblong hole)





## The perfect connection

Self-centring, form-fitting and low-wear clamping — it's possible with the original DEMMELER $^{\rm @}$  PPC clamping bolt



## Very quick clamping and releasing of the clamping elements

Form-fitting thanks to full-area contact with the opposite locating surface

### Reduces material wear

even when aluminium and plastic elements are used – no system bore deformation



### Minimal susceptibility to dirt

because delicate parts such as clamp threads, etc. are fully encapsulated by O-rings

### **Extremely robust**

Made from high-quality hardened steel, maximum precision thanks to ground design

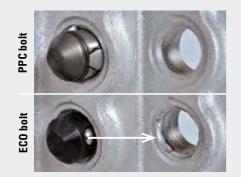
### Long service life guaranteed

in everyday applications





The cone clamping system of the DEMMELER PPC bolts makes the support surface 100 times larger. This results in much higher contact pressure, therefore securing workpieces more reliably. The even force distribution also reduces bore hole wear compared to conventional bolts.



Comparison of a spherical clamping bolt and the polygonal bolt from DEMMELER
Using the PPC bolt prevents serious damage to the bores that can be caused by spherical clamping bolts, for example with aluminium titanium blocks.



### **PPC** bolt

- Highest clamping force with large clamping stroke. Polygonal expansion elements are full-faced, force-fitting and accurately self-centring, thereby reducing the surface load
- · Self-locking, reduces material wear
- · Straightforward, fast and safe handling
- · Minimal susceptibility to dirt
- DEMMELER system lock for DEMMELER electric screwdriver for inserting and tightening as well as loosening and pulling
- With marking grooves for DEMMELER electric screwdrivers
- High-quality hardened steel, maximum precision thanks to ground design
- O-ring prevents simultaneous rotation while tightening and cleans the system bore at the same time



P	P(	; b	oli	t, s	sh	or	l



	D28	D22
The short version	2 system component	s together or
connects	1 system component	on the welding table
Clamping area limits	41-47	31-34
Ø A in mm	28-0,02	22-0,02
B in mm	24	19
Approx. weight in kg	0,5	0,3
Tensile force	Max. 25 kN	Max. 18 kN
Shear force	Max. 200 kN	Max. 100 kN
Tightening torque	70 Nm	25 Nm
Item no.	D28-06025-000	D22-06025-000



PPC	bolt,	long
-----	-------	------



	D28	D22
The long version	3 system component	s together or
connects	2 system component	s on the welding table
Clamping area limits	66-72	49-52
Ø A in mm	28-0,02	22-0,02
B in mm	24	19
Approx. weight in kg	0,6	0,3
Tensile force	Max. 25 kN	Max. 18 kN
Shear force	Max. 200 kN	Max. 100 kN
Tightening torque	70 Nm	25 Nm
Item no.	D28-06026-000	D22-06026-000



The specified loads must not be exceeded when using the clamping bolts.

The discharge of welding voltages, unfavourable leverage and impacts have to be avoided.





### **PPC** countersunk bolt

- Made especially for DEMMELER electric screwdrivers
- Used for simultaneous clamping of two system components
- Easy, convenient clamping through optimised force distribution in the expansion segments
- Minimal susceptibility to dirt due to polygonal shape
- Standard at DEMMELER for a long service life: High-strength, hardened and ground
- With optimum force distribution, DEMMELER opens up a new dimension of possible applications
- Countersunk bolts may only be used in bores and not in oblong holes





PPC countersunk l	oolt, short	D28	D22
	The short version connects	2 system compone 1 system compone	ents together or ent on the welding table
	Clamping area limits	41-47	31-34
	Ø A in mm	28-0,02	22
5116	B in mm	32	25
	Approx. weight in kg	0,3	0,2
	Tensile force	Max. 10 kN	Max. 4 kN
	Shear force	Max. 200 kN	Max. 100 kN
	Tightening torque	50 Nm	15 Nm
	Item no.	D28-06027-000	D22-06027-000





t, long	D28	D22
The long version	3 system compone	nts together or
connects	2 system compone	nts on the welding table
Clamping area limits	66-72	49-52
Ø A in mm	28-0,02	22
B in mm	32	25
Approx. weight in kg	0,6	0,2
Tensile force	Max. 10 kN	Max. 4 kN
Shear force	Max. 200 kN	Max. 100 kN
Tightening torque	50 Nm	15 Nm
Item no.	D28-06028-000	D22-06028-000



The specified loads must not be exceeded when using the clamping bolts.

The discharge of welding voltages, unfavourable leverage and impacts have to be avoided.





### **PC** bolt

- Connecting element for all system components on tables, perforated plates etc. or for special fixtures
- Very fast connection with large clamping stroke
- Very high clamping force due to planetary gear effect and by avoiding a double-start thread
- Force-fitting and form-fitting, O-ring for self-centring connection
- · With clamping area
- Highest clamping force with large clamping stroke using a hex key (D28: WAF 14/D16: WAF 8) or torque wrench
- Turning the ergonomically shaped bolt head causes the balls of the patented PC bolt to make point contact with the bevel – turning it further clamps the original DEMMELER PC bolt
- High-quality hardened steel, maximum precision thanks to ground design
- O-rings prevent simultaneous rotation while tightening and clean the system bore at the same time



|--|



	D28	D16	
The short version	2 system compone	2 system components together or	
connects	1 system compone	ent on the welding table	
Clamping area limits	41-47	22 -24	
Ø A in mm	28-0,02	16-0,01	
B in mm	20	12	
Approx. weight in kg	0,40	0,08	
Tensile force	Max. 25 kN	Max. 10 kN	
Shear force	Max. 200 kN	Max. 50 kN	
Tightening torque	70 Nm	20 Nm	
Item no.	D28-06001-000	D16-06001-000	



### PC bolt, long



	D28	D16
The long version	3 system components together or	
connects	2 system component	s on the welding table
Clamping area limits	63-72	34-36
Ø A in mm	28-0,02	16-0,01
B in mm	20	12
Approx. weight in kg	0,50	0,10
Tensile force	Max. 25 kN	Max. 10 kN
Shear force	Max. 200 kN	Max. 50 kN
Tightening torque	70 Nm	20 Nm
Item no.	D28-06002-000	D16-06002-000



The specified loads must not be exceeded when using the clamping bolts.

The discharge of welding voltages, unfavourable leverage and impacts have to be avoided.



### PC countersunk bolt

- Countersunk bolt head (no interfering edges)
- Only for connecting bores (not oblong holes)
- Clamping using a hex key (D28: WAF 8/D16: WAF 4) or torque wrench
- Countersunk bolts may only be used in bores and not in oblong holes







PC countersunk bo	olt, short	D28	D16
	The short version connects	2 system compone 1 system compone	ents together or ent on the welding table
- 65	Clamping area limits	41-47	22-24
	Ø A in mm	28-0,02	16-0,01
	B in mm	31,6	19
	Approx. weight in kg	0,25	0,04
	Tensile force	Max. 10 kN	Max. 3 kN
	Shear force	Max. 200 kN	Max. 50 kN
	Tightening torque	50 Nm	10 Nm
	Item no.	D28-06004-000	D16-06004-000





, long	D28	D16
The long version	3 system components together or	
connects	2 system components on the welding table	
Clamping area limits	66-72 34-36	
Ø A in mm	28-0,02	16-0,01
B in mm	31,6	19
Approx. weight in kg	0,36	0,06
Tensile force	Max. 10 kN	Max. 3 kN
Shear force	Max. 200 kN	Max. 50 kN
Tightening torque	50 Nm	10 Nm
Item no.	D28-06005-000	D16-06005-000



The specified loads must not be exceeded when using the clamping bolts.

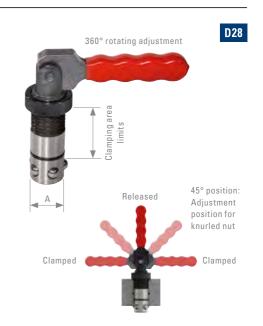
 $The\ discharge\ of\ welding\ voltages,\ unfavourable\ leverage\ and\ impacts\ have\ to\ be\ avoided.$ 



### FCP bolt with handle

- Connecting element for all system components on tables, perforated plates, etc. or for special fixtures
- Defined adjustment position and optimum implementation to ensure constant maximum clamping force
- High closing and shear force
- Used without additional tools
- For quick clamping of the system components

FCP bolt D28 with I	nandle	D28
	Clamping area limits	31-50
	Ø A in mm	28-0,01
	Approx. weight in kg	0,7
	Item no.	D28-06007-000
\$( <b>3</b> )		



### **EcoLINE** bolt

- Connecting element for system components
- Basic version without clamping area



D16



EcoLINE bolt, short

	D28	D16
The short version	2 system components	s together or
connects	1 system component on the welding table	
Clamping area limits	41-44	22
Ø A in mm	28 -0,02	16 -0,01
B in mm	20	12
Approx. weight in kg	0,44	0,08
Item no.	E28-06001-000	E16-06001-000



	D16
The long version	3 system components together or
connects	2 system components on the welding table
Clamping area limits	34
Ø A in mm	16
B in mm	12
Approx. weight in kg	0,1
Item no.	E16-06002-000



### **EcoLINE** bolt

- Connecting element for system components
- Basic version without extended clamping area





ort	D22
The short version connects	2 system components together or 1 system component on the welding table
Clamping area limits	32-33,5
Ø A in mm	22
B in mm	19
Approx. weight in kg	0,25
Tensile force	Max. 18 kN
Shear force	Max. 100 kN
Tightening torque	15 Nm
Item no.	E22-06025-000



EcoLINE bolt D22	, long	D22
	The long version connects	3 system components together or 2 system components on the welding table
1111	Clamping area limits	50-51,5
	Ø A in mm	22
	B in mm	19
	Approx. weight in kg	0,3
	Tensile force	Max. 18 kN
	Shear force	Max. 100 kN
	Tightening torque	15 Nm
	Item no.	E22-06026-000

The specified loads must not be exceeded when using the clamping bolts.

 $The \ discharge \ of \ welding \ voltages, unfavourable \ leverage \ and \ impacts \ have \ to \ be \ avoided.$ 



### Stop and positioning bolt

- For setting out the system components
- For fixing system components in position, e.g. for blocks and stops, as a cost-effective replacement for a second clamping bolt
- Burnished



Stop and positioning bolt D28	
	Description
800	Ø A in mm
	Ø B in mm
	0:

DOIT DZ8	DZO
Description	Also suitable as an adapter for D16
	screw clamps thanks to D16 system
	bore in the head
Ø A in mm	28
Ø B in mm	40
C in mm	74
D in mm	23
Approx. weight in kg	0,4
Item no.	D28-06009-000





bolt D22	D22
Description	Also suitable as an adapter for D16 screw clamps thanks to D16 system bore in the head
Ø A in mm	22
Ø B in mm	31
C in mm	52
D in mm	19
Approx. weight in kg	0,2
Item no.	D22-06009-000





bolt D16	D16
Ø A in mm	16
Ø B in mm	23
C in mm	37
D in mm	12
Approx. weight in kg	0,09
Item no.	D16-06009-000



### **Connecting bush with screw**

- For use as long-term connection
- With self-centring countersunk head on both sides
- Suitable for system bores
- · Clamping using a hex key
- Ideal for connecting welding tables with U-shaped spacer blocks
- Rurnished
- Short version: Connects 2 system components together or 1 system component on the welding table
- Long version: Connects 3 system components together or 2 system components on the welding table







Connecting bush	D28, short, with screw	
	A in mm	35,5
24	Ø B in mm	28
92	Approx. weight in kg	0,18
	Item no.	D28-06003-000
	•	



B, long, with screw	D28
A in mm	60
Ø B in mm	28
Approx. weight in kg	0,26
Item no.	D28-06006-000

D28



Connecting bush	D22, short, with screw	D22
	A in mm	28,75
	Ø B in mm	22
	Approx. weight in kg	0,1
	ltem no.	D22-06003-000



2, long, with screw	D22
A in mm	48
Ø B in mm	22
Approx. weight in kg	0,2
Item no.	D22-06006-000



6, short, with screw	D16	
A in mm	17	
Ø B in mm	16	
Approx. weight in kg	0,04	
Itom no	D16_06003_000	



i, long, with screw	D16
A in mm	25
Ø B in mm	16
Approx. weight in kg	0,05
Item no.	D16-06006-000

### Connecting bush with collar

- For use as long-term connection
- · For connecting two system components
- Suitable for system bore/oblong hole
- Clamping using a hex key (D28: WAF 10 and D16: WAF 6)





Connecting bush D2	B, short, w	ith collar			D28
	A in mm	Ø B in mm	C in mm	Approx. weight in kg	Item no.
-	35	28	10	0,26	D28-06003-003



Connecting bush D1	6, short, w	ith collar			D16
	A in mm	Ø B in mm	C in mm	Approx. weight in kg	Item no.
-	22	16	5	0,05	D16-06003-002





# It doesn't get more modular than this.





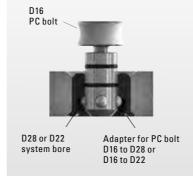
### Adapter for PC bolt D16 to D28/D16 to D22

- Interface between system D28 and D16 or D22 and D16
- Fully compatible with system D28 and system D16 or D22 and D16
- Force-fitting and form-fitting thanks to O-ring, self-centring connection
- O-ring prevents simultaneous rotation while tightening
- 0-ring cleans the system bore













Adapter for PC bolt D16 to D28

 A in mm
 B in mm
 Approx. weight in kg
 Item no.

 20,5
 28-0,02
 0,05
 D00-06010-002

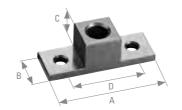
Adapter for PC bolt D16 to D22



D 10 to DZZ			סוט	DZZ
A in mm	B in mm	Approx. weight in kg	ltem no.	_
23	22	0,04	D00-06012-009	

### Interface plate

• Interface between system 28 and system 16 or system 28 and system 22



D28

D22

Interface plate for cla	amping tubes D28 to D16

lamping tub	es DZ8 to DT	ь			D28	סוע
A in mm	B in mm	C in mm	D in mm	Approx. weight in kg	ltem no.	
150	50	50	100	1,04	D00-06015-000	

Interface plate for clamping tubes D28 to D22

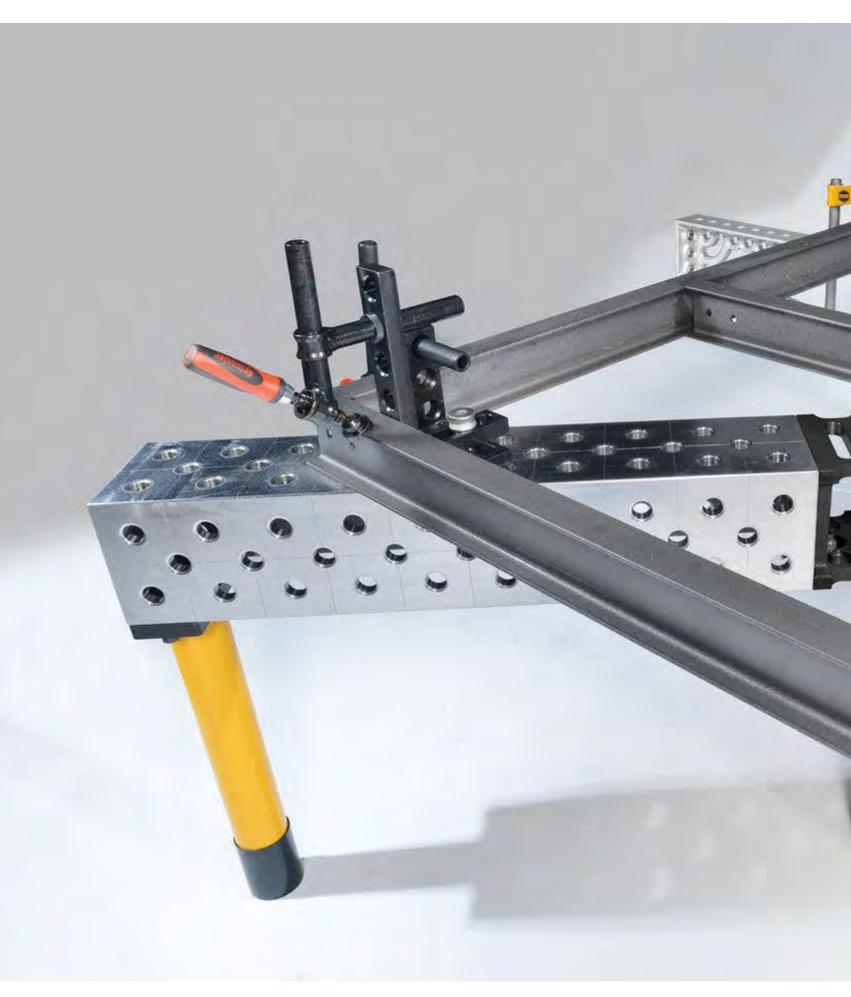


iamping tub	es DZ8 to DZ	DZδ	DZZ			
A in mm	B in mm	C in mm	D in mm	Approx. weight in kg	ltem no.	
150	50	50	100	1,2	D00-06015-001	



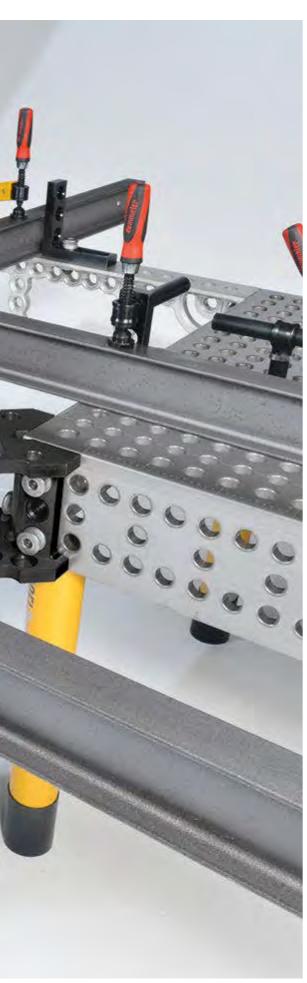
Use clamps and V-blocks from system D28 in systems D22 and D16 too
The interface plate makes it possible for you to use clamps and V-blocks
from system D28 in systems D22 and D16 too.











# **DEMMELER®** spacer blocks

Product benefits of the U-shaped spacer block

132



U-shaped spacer block from page 134



U-shaped spacer block from page 136



U-shaped spacer block page 138



Base plate for U-shaped spacer block page 139



Base plate for U-shaped spacer block page 139



Base plate for U-shaped spacer block page 139



Sliding block



L-shaped spacer block page 140



C-shaped









### spacer block page 141



Support and clamping frame from page 142



**Corner modules** from page 145



Clamping rail page 147



Support and clamping frame page 142



Corner module page 145



**Clamping block** page 146



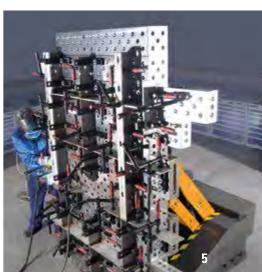
# U-shaped spacer blocks grow to meet your requirements











- 1 Modular use on the rail system
- 2 Use for constructing fixtures
- 3 Setting up a frame
- 4 Modular fixtures
- 5 Use on manipulators









## You can make your production process more flexible with the U-shaped spacer blocks

There are situations where having a bigger table would be nice. We have developed the spacer block so that the clamping table can grow to meet your requirements. A smart system for extending your table temporarily. When you use our rail system, you can extend the support surface with spacer blocks as far as the rails reach.





Table legs for the table extension from a length of 1 m, mounting option



Table legs for use on the rail system (for system D28 only)

- Available in different lengths and versions, depending on the system size
- Clamping surface: Five-sided
- · With grid lines
- For use as a table extension
- From a length of 1 m, option to mount an additional support leg in conjunction with base plate
- · Spacer blocks with hardened surfaces are protected against weld spatter adhesion, thus reducing wear

### Additional options for system D28:

- Optimum use on rail system (page 98) in conjunction with D00-10017-xxx (page 104). Or to build a frame using D28-06003-000 connecting bushes
- Bore spacing for fitted shoulder screws, bottom, matched to base rail width 1000, 2000, 3000 and 4000 mm



### U-shaped spacer block D28, diagonal grid

- For use as a table extension
- Clamping surface: Five-sided
- 100 x 100 mm diagonal grid, with grid lines
- Spacer blocks with hardened surfaces are protected against weld spatter adhesion, thus reducing wear

### Additional options for system D28:

- Optimum use on rail system (page 98) in conjunction with D00-10017-xxx (page 104). Or to build a frame using D28-06003-000 connecting bushes
- For use as a table extension
- From a length of 1 m, option to mount an additional PL28-10010-xxx support leg in conjunction with 00060364 or 00060369 base plate
- $\bullet$  Bore spacing for fitted shoulder screws, bottom, matched to base rail width 1000, 2000, 3000 and 4000 mm





D28

						D28
U-shaped spacer bl diagonal grid on fac		l/hardened ste	eel		Steel	Hardened DEMONT 760 M
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.	Item no.
. 8 11	500	200	200	55	D28-04002-000	D28-04002-500
* W	1000	200	200	102	D28-04002-001	D28-04002-501
<u> </u>	1200	200	200	120	D28-04002-018	D28-04002-518
T Open side	1500	200	200	150	D28-04002-002	D28-04002-502
·	2000	200	200	200	D28-04002-003	D28-04002-503
	2400	200	200	235	D28-04002-032	D28-04002-532
	3000	200	200	285	D28-04002-004	D28-04002-504
	4000	200	200	374	D28-04002-005	D28-04002-505
Al-Drawerson	500	400	200	81	D28-04002-211	D28-04002-511
	1000	400	200	149	D28-04002-222	D28-04002-522
	1200	400	200	174	D28-04002-223	D28-04002-523
4	1500	400	200	215	D28-04002-224	D28-04002-524
↑ Open side	2000	400	200	272	D28-04002-225	D28-04002-525
0,000,0100	2400	400	200	320	D28-04002-226	D28-04002-526
	3000	400	200	400	D28-04002-227	D28-04002-527
	4000	400	200	526	D28-04002-228	D28-04002-528

Other dimensions available on request.

### Compatible system accessories

D28

**Table legs**See page 45
or page 104



D28

Base plate for U-shaped spacer block D28 See page 139







### U-shaped spacer block D28, diagonal grid, aluminium titanium



D28

- For use as a table extension
- Up to two-thirds lighter than steel but still stable
- · Also suitable for use in robot cells
- 100 x 100 mm diagonal grid, with grid lines
- · Clamping surface: Five-sided

### Additional options for system D28:

- Optimum use on rail system (page 98) in conjunction with D00-10017-xxx (page 104).
   Or to build a frame using D28-06003-000 connecting bushes
- From a length of 1 m, option to mount an additional PL28-10010-xxx support leg in conjunction with 00060364 base plate
- Bore spacing for fitted shoulder screws, bottom, matched to base rail width 1000 mm (with length of 1000 mm)
- Fitted bores with M12 thread to attach the table legs for the PL28-10017-xxx\*1 spacer block/sliding leg or the 00060364 base plate with fitted shoulder screws (\*1 see page 104)





### U-shaped spacer block D28, face sides, diagonal grid, aluminium titanium



CK DZO, lace slue	D20			
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
500	200	200	20	D28-04002-270
1000	200	200	35	D28-04002-271

↑ Open side Other dimensions available on request.





### Compatible system accessories



**Table legs**See page 45
or page 104





Base plate for U-shaped spacer block D28 See page 139







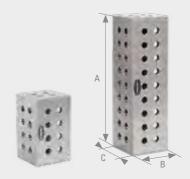


U-shaped spacer blocks are also suitable for use in automation solutions.

D22

### U-shaped spacer block D22, steel

- Hardened surface for reduced wear and protection against weld spatter adhesion
- For use as a table extension
- Clamping surface: Five-sided
- Grid lines
- 50 x 50 mm grid



		D22				
U-shaped spacer b		l/hardened ste	eel		Steel	Hardened DEMONT 760 M
//50500	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.	Item no.
	250	150	150	17	D22-04002-000	D22-04002-019
2.0	500	150	150	30	D22-04002-001	D22-04002-020



gria, stoci, naracinca stoci					
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.	Item no.
250	150	150	17	D22-04002-000	D22-04002-019
500	150	150	30	D22-04002-001	D22-04002-020
1000	150	150	55	D22-04002-002	D22-04002-021

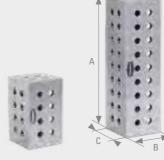






D22

- Up to two-thirds lighter than steel but still stable
- Also suitable for use in robot cells
- Clamping surface: Five-sided
- Grid lines
- 50 x 50 mm grid



U-shaped spacer block D22, face sides, 50  $\times$  50 mm grid, aluminium titanium

100	501
43	9
10	
<b>A</b>	
Open side	9

OCK DZZ, Tace SIG	DZZ			
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
250	150	150	6,5	D22-04002-016
500	150	150	11,5	D22-04002-017
1000	150	150	20,5	D22-04002-018

### Compatible system accessories



**Table legs** See page 45



D22

Base plate for U-shaped spacer block D22 See page 139

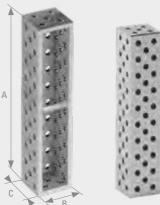




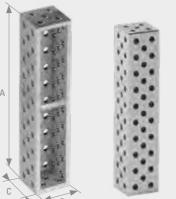


## U-shaped spacer block D16, diagonal grid, steel

- For use as a table extension
- Use: Five-sided
- · With grid lines
- · Spacer blocks with hardened surfaces are protected against weld spatter adhesion, thus reducing wear
- 50 x 50 mm diagonal grid



Steel



U-shaped spacer block D16
Face sides, 50 x 50 mm diagonal grid, steel/hardened steel



A in mm B in mm C in mm Approx. weight in kg Item no. Item no. 500 100 D16-04002-300 100 13 D16-04002-000 1000 100 100 25 D16-04002-001 D16-04002-301 1500 D16-04002-302 100 100 37 D16-04002-002 2000 100 100 50 D16-04002-003 D16-04002-303

Other dimensions available on request.

### U-shaped spacer block D16, steel

- For use as a table extension
- · Use: Five-sided
- · With grid lines
- Spacer blocks with hardened surfaces are protected against weld spatter adhesion, thus reducing wear
- 50 x 50 mm grid



Hardened

**DEMONT 760 M** 

Hardened

U-shaped spacer block D16, face sides, 50 x 50 mm

m grid, stee	l/hardened ste	eel		Steel	DEMONT 760 M
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.	Item no.
500	100	150	20	D16-04003-026	D16-04003-326
1000	100	150	37	D16-04003-070	D16-04003-304
1500	100	150	55	D16-04003-071	D16-04003-323
2000	100	150	72	D16-04003-065	D16-04003-365



Other dimensions available on request.



### Give your spacer blocks a leg up.

### Base plate D28 for U-shaped spacer blocks

- Base plate for U-shaped spacer block D28-04002-xxx
- For mounting the PL28-10010-xxx support leg from a length of 1 m
- Including 2x fitted shoulder screws M12-16 H8 x 30
- 2x fitted bores for fitted shoulder screws
- Bore for PL28-10010-xxx support leg (page 45). Other bores are D28 system bores



D28

### Base plate D28 for U-shaped spacer blocks

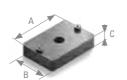


_	Silapeu s	pacei bioc	520		
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
	200	100	25	3,6	00060364
	400	100	25	7	00060369



### Base plate D22 for U-shaped spacer blocks

- Base plate for U-shaped spacer block D22-04002-xxx
- $\bullet\,$  For mounting the PL22-10010-xxx leg/table leg from a length of 1 m
- $\bullet$  Including 2x fitted shoulder screws M8–10 H8 x 30
- 2x fitted bores for fitted shoulder screws
- Bore for PL22-10010-xxx support leg (page 45)





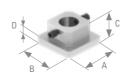
### Base plate D22 for U-shaped spacer blocks

)-Siiahen 2	pacei bioi	DZZ		
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
150	100	25	2,8	00108898



### Base plate D16 for U-shaped spacer blocks

- Base plate for D16-04002-xxx and D16-04003-xxx U-shaped spacer blocks
- For mounting the PL16-10010-xxx support leg
- $\bullet \ \ Including \ 2x \ mounting \ bolts$





### Base plate D16 for U-shaped spacer blocks



-shaped s	pacer bloc	рть			
Ainmm Binmm Cinmm Approx. weight in kg				Item no.	
95	95	50	0.7	00097469	





# These spacer blocks are suitable for flexible use, can function as a table extension and table connection, and are also suitable for vertical structures.

### Sliding block D28, steel

- · Used as a bridge between locating and clamping angles or 3D welding tables
- Can be used on four sides as a stop strip or table extension
- · For use with confined installation space
- · Numerous possible applications thanks to system bores and oblong holes
- · With grid lines



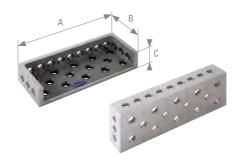
D28

Sliding block D28, steel					D28
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
******	500	100	100	15	D28-04004-000

Other dimensions available on request.

### L-shaped spacer block D28, steel

- Table extension/table connection for several 3D welding tables
- Third axis for extension as clamping tower or laterally as precise table stop
- · Connection of system components
- · Use: Four-sided
- · With grid lines



D28

L-shaped spacer bl	D28					
	A in mm	B in mm	C in mm	Approx. weight in kg	Description	ltem no.
311	500	200	100	26	100 x 100 diagonal grid	D28-04001-000
1 -	1000	200	100	52	100 x 100 diagonal grid	D28-04001-001

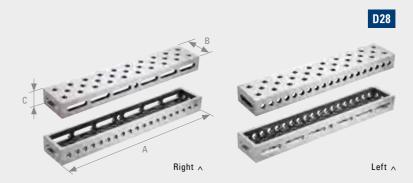
Other dimensions available on request.





### C-shaped spacer block D28, steel

- Table extension between two 3D welding tables using D28-06003-000 connecting bushes
- Permanent screw connection
- · Connection of system components
- · As a table stop
- · Continuously adjustable thanks to oblong holes
- Use: Five-sided
- · With grid lines



C-snaped spacer bi
1
1.0.00
100000000000000000000000000000000000000
1

ock D28, steel, right					D28	
	A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
	500	200	100	31	100 x 100 diagonal grid, right	D28-04003-010
	1000	200	100	58	100 x 100 diagonal grid, right	D28-04003-011

C-shaped spacer block D28, steel, left						D28
Part Day	A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
THE PARTY OF THE P	500	200	100	31	100 x 100 diagonal grid, left	D28-04003-002
	1000	200	100	58	100 x 100 diagonal grid, left	D28-04003-003

Other dimensions available on request.

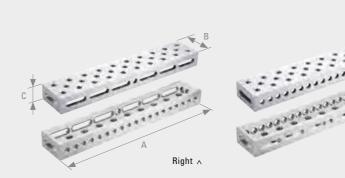


**D28** 

Left ^

### C-shaped spacer block D28, aluminium titanium

- High-strength aluminium titanium alloy for approx. 60% weight reduction
- Approx. 10% higher bending strength compared to cast iron
- Table extension between two 3D welding tables using D28-06003-000 connecting bushes with permanent screw connection
- Connection of system components
- · As a table stop
- Continuously adjustable thanks to oblong holes
- Use: Five-sided
- With grid lines





OCK D28, Aluminium titanium, right					D28
A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
500	200	100	11	100 x 100 diagonal grid, right	D28-04003-025
1000	200	100	19	100 x 100 diagonal grid, right	D28-04003-027

C-shaped spacer blo
20222000
All a services

OCK DZ8, alu	DZO				
A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
500	200	100	11	100 x 100 diagonal grid, left	D28-04003-024
1000	200	100	19	100 x 100 diagonal grid, left	D28-04003-026

### Support and clamping frame

- Five full clamping faces with system bores result in numerous possible applications
- As connecting elements between different system components
- Suitable for very versatile combinations:
  - >> Using system bore
  - >> Variable movement using oblong holes
- Made from one piece for excellent stability and durability
- Use as bracket or extension
- D28: hardened cast, D16: burnished cast
- With grid lines











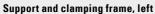
Left ∧

Sunnort	and o	clamning	frame	riaht



iy iraille, riyiit	D28	DIO
A in mm	300	150
B in mm	200	100
C in mm	100	50
Approx. weight in kg	16	2,1
Description	Right	Right
Item no.	D28-03005-001	D16-03005-001







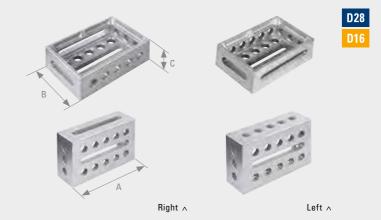
g rramo, rore	D20	D10
A in mm	300	150
B in mm	200	100
C in mm	100	50
Approx. weight in kg	16	2,1
Description	Left	Left
Item no.	D28-03005-004	D16-03005-004



### Support and clamping frame, aluminium titanium



- High-strength aluminium titanium alloy for approx. 60% weight reduction and approx. 10% higher bending strength compared to cast iron
- Five full clamping faces enable numerous clamping options
- Variable movement with oblong holes
- Anodised



## Support and clamping frame, aluminium titanium, right



iigiit	DZO	סוט
A in mm	300	150
B in mm	200	100
C in mm	100	50
Approx. weight in kg	5,80	0,78
Description	Right	Right
Item no	D28-03005-011	D16-03005-010

## Support and clamping frame, aluminium titanium, left

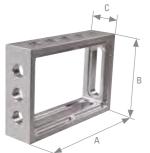


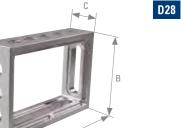
GIL	DZO	DIO
A in mm	300	150
B in mm	200	100
C in mm	100	50
Approx. weight in kg	5,80	0,78
Description	Left	Left
Item no.	D28-03005-012	D16-03005-012



### Support and clamping frame D28, aluminium titanium

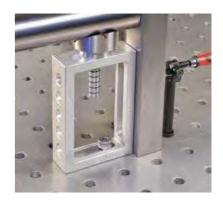
- Support and clamping frame made from high-strength aluminium titanium alloy
- Can be used on four sides, machined on six sides
- With oblong hole in X-Y and grid bore in X-Y direction
- · Extremely variable
- The precision scaling in the X and Y directions meets all needs







Support and clan	nping frame D28, aluminium titanium	D28
	A in mm	300
	B in mm	200
	C in mm	75
2	Approx. weight in kg	3,1
	Description	Right
	Item no.	D28-03005-014









#### **Corner module**

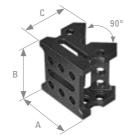


- Diagonal table extension
- Can be used flexibly as a V-block, support, stop and much more
- D28: hardened cast, D16: burnished cast











Left /

#### Corner module, right



	DZU	D10
A in mm	200	100
B in mm	200	100
C in mm	170	85
Approx. weight in kg	13	1,9
Description	Right	Right
Item no.	D28-04005-000	D16-04005-000



#### Corner module, left

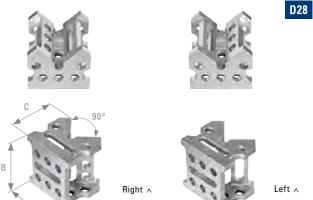


	D28	D16
A in mm	200	100
B in mm	200	100
C in mm	170	85
Approx. weight in kg	13	1,9
Description	Left	Left
Item no.	D28-04005-003	D16-04005-003

#### A Alu-Titan

#### Corner module D28, aluminium titanium

- High-strength aluminium titanium alloy for approx.
   60% weight reduction and approx. 10% higher bending strength compared to cast iron
- Diagonal table extension
- Can be used flexibly as a V-block, support, stop and much more

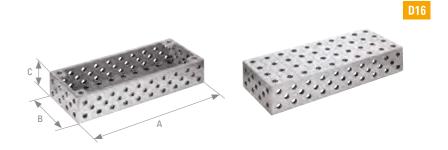


ule D28, aluminium	titanium, right	t			D28
A in mm	B in mm	C in mm	Approx. weight in kg	Description	ltem no.
200	200	170	4,9	Right	D28-04005-004

Corner module D28	D28					
A A	A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
500	200	200	170	4,9	Left	D28-04005-005

#### **Clamping block D16**

- Use: Five-sided
- Third axis for extension as clamping tower or laterally as precise table stop
- Connection of system components
- With grid lines



Clamping block D10	D16					
4300	A in mm	B in mm	C in mm	Approx. weight in kg	Description	ltem no.
	500	200	100	19	50 x 50 grid	D16-04010-000
1000						

Clamping block D16	D16					
	A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
Control of the last of the las	500	500	100	39	50 x 50 grid	D16-04011-000





## **Clamping rail D28**

- Six clamping faces
- $\bullet\,$  Three rows of system bores, 100 x 100 mm grid
- With grid lines



Clamping rail D28 L1	000				D28
	A in mm	B in mm	Approx. weight in kg	Description	Item no.
Commen	1000	100	49	100 x 100 grid	D28-04010-001

Clamping rail D28 L	2000				D28
	A in mm	B in mm	Approx. weight in kg	Description	Item no.
AND DECKE	2000	100	97	100 x 100 grid	D28-04010-002

Clamping rail D28 L3	3000				D28
	A in mm	B in mm	Approx. weight in kg	Description	Item no.
********	1000	100	145	100 v 100 grid	D29 04010 002









# **DEMMELER®** locating and clamping angles

Product benefits of the PROFIPremiumLINE angle series

150

Product benefits of the universal stop

166

D28



**PROFIPremiumLINE** locating and clamping angles, aluminium titanium from page 152



Locating and clamping angles page 160



Mounting angles page 165



**Universal stop** L300/L500 page 172



**PROFIPremiumLINE** locating and clamping angles, hardened cast page 154



Locating and clamping angles from page 161



Flat angle trim page 165



Stop strip page 173



**PROFIPIUSLINE** locating and clamping angles, hardened cast page 155



Locating and clamping angles large page 162





Universal stop small page 167



Contour stop page 174



**PROFIEcoLINE** locating and clamping angles, hardened cast page 157



Locating and clamping angles with face plate page 163





**Displacement** stop page 168



**Angle-setting** template page 174



**PROFIPremiumLINE** locating and clamping angle 2000 page 158



Locating and clamping angles, aluminium titanium page 164







**PROFIEcoLINE Universal** stop large page 168



Adapter plate page 175



Universal pivot and tilt angle page 159



Angle bracket page 164

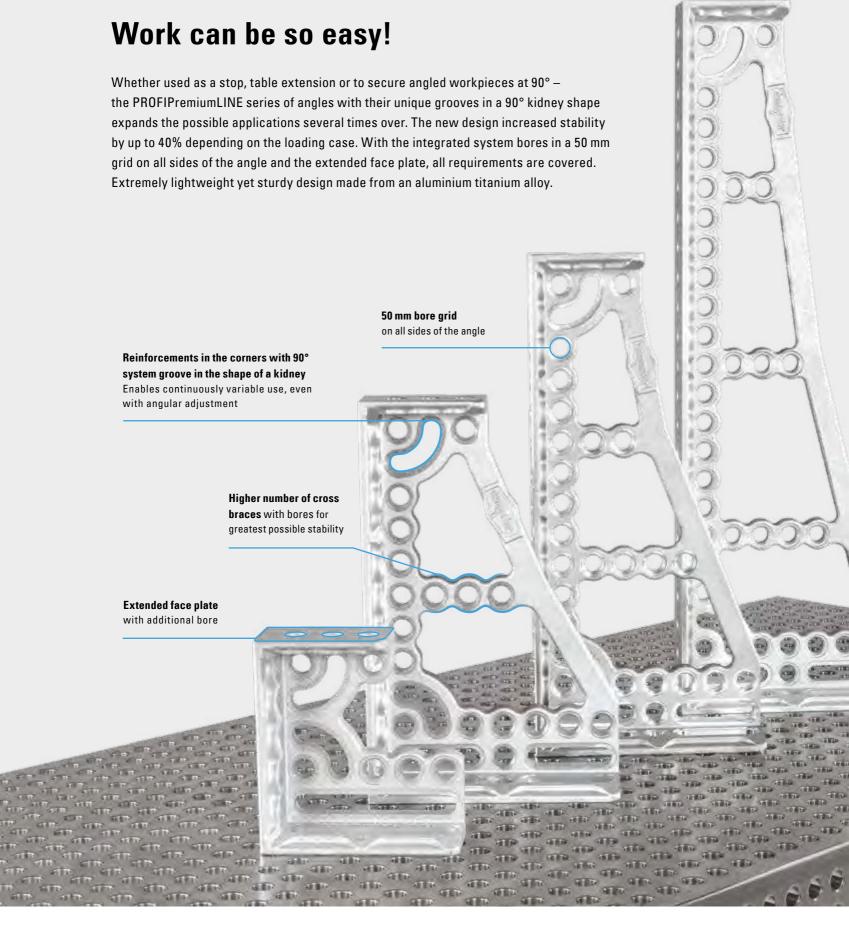


Universal stop large from page 170



Stop disc page 175









PROFIPremiumLINE locating and clamping angles, aluminium titanium page 153



Sliding stop page 168



**PROFIPIUSLINE** locating and clamping angles, cast page 156



**PROFIEcoLINE** universal stop large page 168



**PROFIEcoLINE** locating and clamping angles, hardened cast page 157



Universal stop

large from page 169





tilt angle page 159







Locating and clamping angles, small

page 160



Universal stop

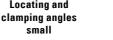
L300/L500

page 172

Locating and













Stop bar page 173



Locating and clamping angles from page 161



Stop bar page 173



Locating and

clamping angles

from page 161

Locating and clamping angles, aluminium titanium page 164

Universal stop

small

page 167



Stop disc page 175



Locating and clamping angles large page 162



Contour stop





Flat angle trim page 165



Angle-setting template page 174



Universal stop

small page 167





Adapter plate page 175





Stop disc page 175



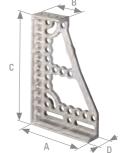


#### PROFIPremiumLINE locating and clamping angles, aluminium titanium



- Reinforcements in the corners with a 90° system groove in the shape of a kidney allow continuously variable use, even with angular adjustment
- · 40% better rigidity
- Extended face plate with additional bore
- Bore grid at 50 mm intervals, also on all sides of the angle
- Four locating/usable surfaces
- 2x system groove in 90° kidney shape
- With precision scaling
- Anodised





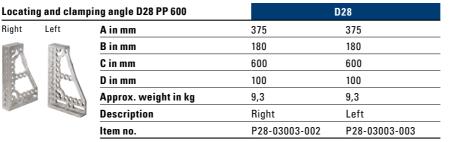






Locating	g and clamp	ing angle D28 PP 300		D28		
Right	Left	A in mm	275	275		
1980	1000	B in mm	180	180		
Kan K	C in mm	300	300			
1	1	D in mm	100	100		
		Approx. weight in kg	5,0	5,0		
		Description	Right	Left		
		Item no.	P28-03002-002	P28-03002-003		

Right	Left
	S. S









Locating and clamping angle D28 PP 800			D28	
Left	A in mm	375	375	
33	B in mm	180	180	
	C in mm	800	800	
	D in mm	100	100	
	Approx. weight in kg	11,5	11,5	
	Description	Right	Left	
	ltem no.	P28-03004-000	P28-03004-001	
		Left A in mm B in mm C in mm D in mm Approx. weight in kg Description	Left         A in mm         375           B in mm         180           C in mm         800           D in mm         100           Approx. weight in kg         11,5           Description         Right	

Locating	and clam
Right	Left

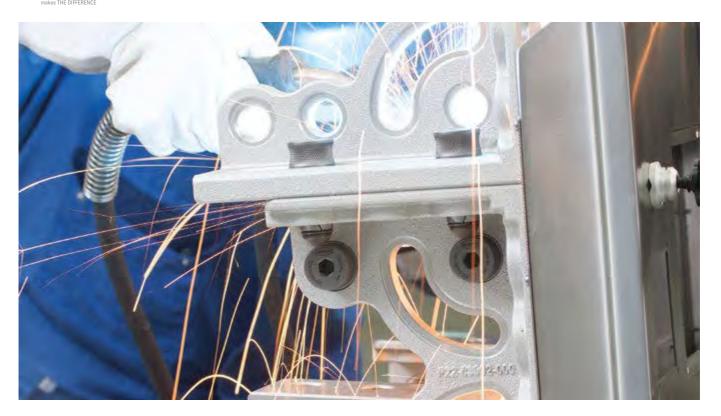
ng angle D28 PP 1200		D28	
A in mm	375	375	
B in mm	180	180	
C in mm	1200	1200	
D in mm	100	100	
Approx. weight in kg	15,3	15,3	
Description	Right	Left	
Item no.	P28-03009-000	P28-03009-001	













Right





J . J .		
A in mm	225	225
B in mm	180	180
C in mm	250	250
D in mm	80	80
Approx. weight in kg	3,3	3,3
Description	Right	Left
Item no.	P22-03002-002	P22-03002-003

Locating and clamping angle D22 PP 500			D22	
Right	Left	A in mm	325	325
merces.	36446	B in mm	180	180
BA.	20	C in mm	500	500
lioo\	Joel .	D in mm	80	80
Bire		Approx. weight in kg	6,4	6,4
2		Description	Right	Left
		Itom no	D22 02002 002	D33 03003 003

Binmi	n	180	180
C in mi	n	500	500
D in mı	n	80	80
Approx	. weight in kg	6,4	6,4
Descri	ption	Right	Left
Item no	).	P22-03003-002	P22-03003-003

Locating and clamping angle D22 PP 750			D22	
Right	Left	A in mm	325	325
1000	107	B in mm	180	180
R1		C in mm	750	750
Sool Bool	D in mm	80	80	
loco)	000	Approx. weight in kg	8,3	8,3
Burn Brand	Description	Right	Left	
10000	Record	Item no.	P22-03004-000	P22-03004-001



#### Locating and clamping angle D28 PROFIPremiumLINE, hardened casting



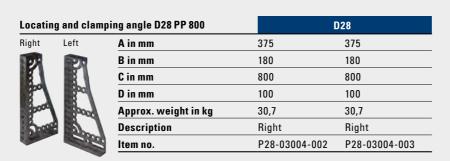
D28

- Reinforcements in the corners with a 90° system groove in the shape of a kidney allow continuously variable use, even with angular adjustment
- · 40% better rigidity
- Extended face plate with additional bore
- Bore grid at 50 mm intervals, also on all sides of the angle
- Four locating/usable surfaces
- 2x system groove in 90° kidney shape
- · With precision scaling
- Hardened cast



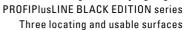
Locating and clamping angle D28 PP 300			D28	
Right Left		A in mm	275	275
R. R	B in mm	180	180	
		C in mm	300	300
	1000	D in mm	100	100
		Approx. weight in kg	13,3	13,3
		Description	Right	Left
		Item no	P28-03002-000	P28-03002-001









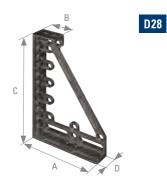




#### Locating and clamping angle D28 PROFIPIusLINE, hardened cast



- Three full clamping faces with system bores
- With oblong holes for continuous adjustment
- Including precision scaling to adjust the mounting dimensions
- Improved sliding behaviour through the combination of cast iron on steel
- Grid lines reduce the set-up time
- With face plate for additional set-up system components
- Hardened cast: Ultimate stability and toughness
- With precision scaling and clamping strip
- With grid lines



Locatin	g and clam	oing angle D28 PL 300		D28	
Right	Left	A in mm	275	275	
	dia.	B in mm	130	130	
		C in mm	300	300	
-		D in mm	100	100	





A in mm	275	275
B in mm	130	130
C in mm	300	300
D in mm	100	100
Approx. weight in kg	11,4	11,4
Description	Right	Left
Item no.	PL28-03002-000	PL28-03002-001
•		



Locating and clamping angle D28 PL 600			D28		
Right	Left	A in mm	375	375	
N	<b>(27)</b>	B in mm	130	130	
		C in mm	600	600	
		D in mm	100	100	
	507	Approx. weight in kg	19,9	19,9	
•		Description	Right	Left	
		Item no.	PL28-03003-000	PL28-03003-001	



Locating and clamping angle D28 PL 800			D28	
Right	Left	A in mm	375	375
RR		B in mm	130	130
		C in mm	800	800
E.A	- A	D in mm	100	100
		Approx. weight in kg	24,5	24,5
Section 2	Bay.	Description	Right	Left
		Item no.	PL28-03004-000	PL28-03004-001





#### Locating and clamping angle D16 PROFIPIusLINE, cast

- Three full clamping faces with system bores
- Oblong holes for continuous adjustment
- Improved sliding behaviour through the combination of cast iron on steel
- Grid lines reduce the set-up time
- With face plate for additional set-up system components
- Special cast: Ultimate stability and toughness

• Powder-coated



Locating and clamping angle D16 PL 200			D16	
Right	Left	A in mm	137,5	137,5
	15	B in mm	75	75
	16	C in mm	200	200
	-		D in mm	50
		Approx. weight in kg	1,7	1,7
		Description	Right	Left
		Item no.	D16-03002-000	D16-03002-001

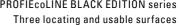


Locating and clamping angle D16 PL 400			D16	
Left	A in mm	187,5	187,5	
<b>R</b>	B in mm	75	75	
	C in mm	400	400	
2000	D in mm	50	50	
	Approx. weight in kg	4,0	4,0	
	Description	Right	Left	
	Item no.	D16-03003-000	D16-03003-001	
		Left A in mm B in mm C in mm D in mm Approx. weight in kg Description	Left A in mm 187,5  B in mm 75  C in mm 400  D in mm 50  Approx. weight in kg 4,0  Description Right	



Locati	ocating and clamping angle D16 PL 600			D16	
Right	Left	A in mm	187,5	187,5	
	B in mm	75	75		
	C in mm	600	600		
	D in mm	50	50		
	Approx. weight in kg	5,4	5,4		
	Description	Right	Left		
Sec. 1		Item no.	D16-03004-000	D16-03004-001	



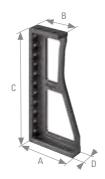




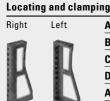
#### Locating and clamping angles PROFIEcoLINE, hardened cast



- Eco series reduced to the essentials, yet tremendously flexible
- System bores in a 50 mm grid
- Three usable locating faces for all common locating and clamping tasks
- Hardened cast
- Cost-effective version
- Three locating surfaces
- With face plate









ng angle D28 PE 600		28
A in mm	275	275
B in mm	190	190
C in mm	600	600
D in mm	80	80
Approx. weight in kg	19	19
Description	Right	Left
Item no.	PE28-03003-000	PE28-03003-001

Right	Left
B	R



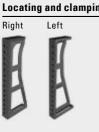






Locating and clamping angle D22 PE 500			D22	
Right	Left	A in mm	275	275
MI	FT	B in mm	175	175
		C in mm	500	500
	r	D in mm	80	80
		Approx. weight in kg	13,5	13,5
•	*	Description	Right	Left
		Item no.	PE22-03003-000	PE22-03003-001

Right	
17	
H	
W	
U	



ng angle D22 PE 750	D22	
A in mm	275	275
B in mm	175	175
C in mm	750	750
D in mm	80	80
Approx. weight in kg	18,5	18,5
Description	Right	Left
Item no.	PE22-03004-000	PE22-03004-001



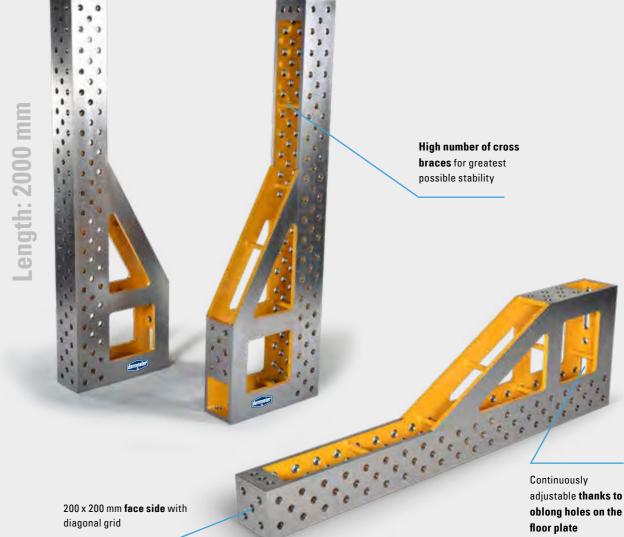
#### Locating and clamping angle D28 PROFIPremiumLINE 2000

- For very large-scale and difficult applications
- Extremely sturdy design
- With system bores in a 100 mm double grid on all sides

| A in mm | 600 | | B in mm | 200 | | C in mm | 200 | | Din mm | 200 | | Approx. weight in kg | 272 | | Item no. | D28-50099-008



D28





#### Universal pivot and tilt angle

- Continuously adjustable from 0° to 225° with precision scaling
- Hydromechanical clamping:
  - >> Completely maintenance-free
  - >> Holding force up to 1600 Nm torque
- Can be combined with other system components
- Can be used horizontally and vertically





#### Universal pivot and tilt angle D28, hardened cast

D28

ight Let



- · Hardened cast
- With precision scaling

A in mm	B in mm	Approx. weight in kg	Description	Item no.
425	100	22	Right	D28-03007-000
425	100	22	Left	D28-03007-003

#### Universal pivot and tilt angle D28, aluminium titanium

D28

Right L



- High-strength aluminium titanium alloy for approx. 60% weight reduction and approx. 10% higher bending strength compared to cast iron
- Anodised
- With precision scaling

A in mm	B in mm	Approx. weight in kg	Description	ltem no.
425	100	9	Right	D28-03007-004
425	100	9	l eft	D28-03007-005

#### Universal pivot and tilt angle D16, hardened steel

D16

Right L



- Burnished steel
- Without precision scaling

A in mm	B in mm	Approx. weight in kg	Description	ltem no.
225	50	3	Right	D16-03007-000
225	50	3	Left	D16-03007-003



Ideal for clamping workpieces with flexible alignments



Continuously adjustable from 0° to 225° with precision scaling  $\,$ 



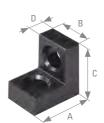
Maintenance-free hydromechanical clamping with high holding forces



#### Locating and clamping angle PROFIPIusLINE small



- · Ideal for confined spaces
- · The height of the support surfaces can be continuously adjusted, for example in conjunction with locating and clamping angles with oblong hole/oblong hole (page 161)





#### Locating and clamping angle PL small,

bore/bore D28 A in mm 75 75 37,5 50 50 B in mm 25 D in mm 25 18 12 0,9 0,12 Approx. weight in kg 0,98 Description Hardened steel Hardened steel Burnished steel D28-03001-008 D22-03001-008 D16-03001-008 Item no.

.ocating	and	clamping	angle	PL small,
ara/ahla				

 D28	D22	D16
D20	022	D 10

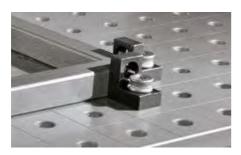


- · Continuous adjustment and locking via oblong hole

• Dimensions can be adjusted using grid lines on the 3D welding table

• Combination of bore/oblong hole

	3		
A in mm	175	175	90
B in mm	50	50	25
C in mm	75	75	37,5
D in mm	25	18	12
Approx. weight in kg	1,4	1,1	0,16
Description	Hardened steel	Hardened steel	Burnished steel
Item no.	D28-03001-005	D22-03001-005	D16-03001-002



Locating and clamping angle small, bore/bore



Locating and clamping angle small, bore/oblong hole



Locating and clamping angle, bore/bore

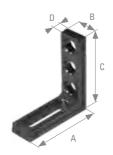


Combinations of bore/oblong hole

#### **PROFIPIUSLINE locating and clamping angles**



- Dimensions can be adjusted using grid lines on the 3D welding table
- Two full angle surfaces therefore can be used from both sides
- · Ideal for confined spaces
- · Precision scaling on both sides





Locating and clamping angle PL,

bore/oblong hole D22 D28



• Combination of system bores/oblong hole for numerous clamping options

• Compatible with all locating and clamping angles so that the oblong hole can be used to form a height-adjustable support

to roim a morgine aujuotubi	o oupport		
A in mm	175	175	90
B in mm	50	50	25
C in mm	175	175	90
D in mm	25	18	12
Approx. weight in kg	1,8	1,7	0,24
Description	Hardened cast	Hardened steel	Burnished steel
Item no.	PE28-03001-000	PE22-03001-000	D16-03001-000

Locating and clamping angle PL, oblong hole/oblong hole

D28 D22 · Continuous adjustment and locking



- Compatible with all locating and clamping angles so that both oblong holes can be used
- to form a height-adjustable support

A in mm	175	175	90
B in mm	50	50	25
C in mm	175	175	90
D in mm	25	18	12
Approx. weight in kg	1,5	1,5	0,20
Description	Hardened cast	Hardened steel	Burnished steel
Item no.	D28-03001-003	D22-03001-003	D16-03001-003

Locating and clamping angle PL, bore/bore



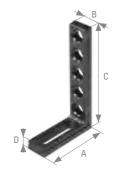
	D28	D22	D16
A in mm	175	175	90
B in mm	50	50	25
C in mm	175	175	90
D in mm	25	18	12
Approx. weight in kg	2,1	1,8	0,28
Description	Hardened cast	Hardened steel	Burnished steel
Item no.	D28-03001-004	D22-03001-004	D16-03001-004



#### Locating and clamping angles PROFIEcoLINE large



- Combination of system bores/oblong hole for numerous clamping options
- Precision scaling on both sides
- Two full angle surfaces therefore can be used from both sides
- Dimensions can be adjusted using grid lines on the 3D welding table
- Compatible with all locating and clamping angles so that the oblong hole can be used to form a height-adjustable support





#### Locating and clamping angle PE large,

bore/oblong hole



	D28	D16
A in mm	175	90
B in mm	50	25
C in mm	275	140
D in mm	25	12
Approx. weight in kg	2,4	0,32
Description	Hardened cast	Burnished steel
Item no.	PE28-03008-000	D16-03008-000

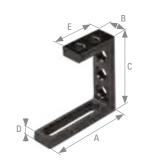




#### Locating and clamping angles PROFIPIusLINE with face plate



- Extended face plate with two bores in the face plate
- Extended base plate with oblong hole, so can be moved in the grid
- Precision scaling on both sides
- Hardened cast





# Locating and clamping angle D28 PL 200 with face plate

	DZ0	
A in mm	225	
B in mm	50	
C in mm	200	
D in mm	25	
E in mm	125	
Approx. weight in kg	2,8	
Description	Hardened cast	
Item no.	PL28-03001-015	



# Locating and clamping angle D28 PL 300 with face plate



	D28
A in mm	175
B in mm	50
C in mm	300
D in mm	25
E in mm	125
Approx. weight in kg	3,2
Description	Hardened cast
Item no.	PL28-03001-016





#### Locating and clamping angles PROFIPIusLINE, aluminium titanium

- Extended face plate with two bores in the face plate
- Extended base plate with 150 oblong hole therefore can be moved in the 50 mm grid
- · Aluminium titanium





#### Locating and clamping angles PL, aluminium titanium



	D28	D22
A in mm	250	250
B in mm	50	50
C in mm	300	300
D in mm	150	150
Approx. weight in kg	1,8	1,7
Item no.	PP28-03001-017	PP22-03001-017



#### **Angle bracket D28 PROFIPIusLINE**

- Angle bracket with an incredible range of applications: Whether just as a stop, or for clamping angled parts
- Combination of free angle setting, form-fitting 15° increments or as 90° stop
- With precision scaling
- Aluminium titanium



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Angle	bracket	D28	PL
Right	Left		





<b>-</b>		520
A in mm	200	200
B in mm	200	200
C in mm	75	75
Approx. weight in kg	7,3	7,3
Description	Right	Left
Item no.	P28-05013-013	P28-05013-014



D28



#### **Mounting angle D28**



D28

- Strong connection of workpieces
- Very robust locating and locking angle for workpieces and system components
- Direct connection between 3D welding table and base rail
- · Hardened steel



#### Mounting angle D28



	D28	
A in mm	150	
B in mm	75	
C in mm	25	
Approx. weight in kg	2,9	
Description	Hardened steel	
Item no.	D28-50003-000	



Can be connected to base rail

#### Flat angle trim



- Full locating surfaces inside and outside
- Many possibilities thanks to oblong holes and system bores
- Continuously movable using oblong holes



D28
D16





D28	D16
375	187,5
500	250
25	12
12	1,46
Hardened steel	Burnished steel
D28-03006-000	D16-03006-000
	375 500 25 12 Hardened steel

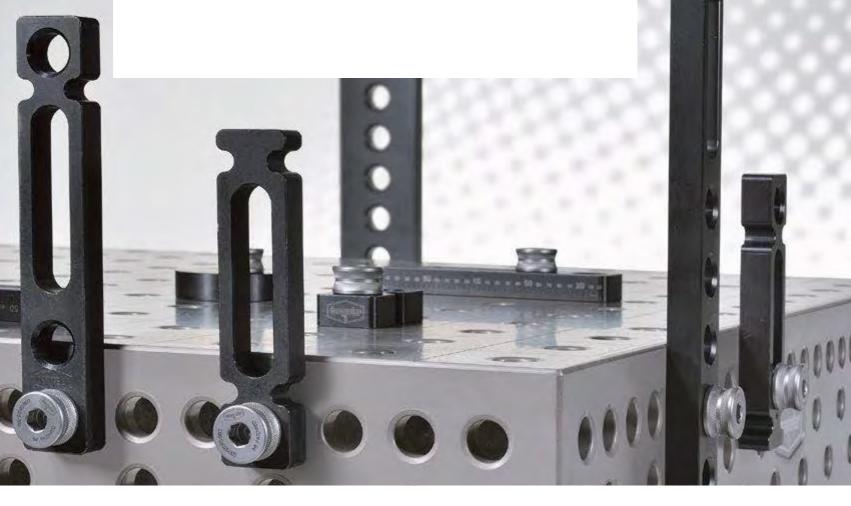


#### A secure stop in every clamping situation

# Universal stops offer ultimate flexibility

They are easy to use in confined work areas. Precision scaling as standard enables precision adjustment using grid lines. Stops can be continuously adjusted using a combination of system bore and oblong hole. This gives you an infinite variety of clamping options. DEMMELER PPC bolts ensure precise, continuous positioning in the table drilling pattern. For corner stops, additional notches are used for attachment.

- Simple fixing of all components
- Machining of all components in positions with absolutely zero play
- Controlled pre-tensioning and controlled adjustment





#### **Universal stop small**



- Preferred use in confined work areas
- Can also be used for corner connections thanks to notch



D28 D22

# Universal stop small,



I, hardened steel	D28	D22	D16	
A in mm	100	100	55	
B in mm	50	50	25	
C in mm	25	18	12	
Approx. weight in kg	0,64	0,55	0,08	
Description	Hardened steel	Hardened steel	Burnished steel	
ltem no.	D28-05002-000	D22-05002-000	D16-05002-000	

- 200
SP 37 3



Universal stop sm	ıall, aluminium	D28	D16
	A in mm	100	55
	B in mm	50	25
1	C in mm	25	12
	Approx. weight in kg	0,23	0,03
	Description	Aluminium	Aluminium
	Item no.	D28-05002-010	D16-05002-010



### **Universal stop PROFIEcoLINE small**



- Preferred use in confined work areas
- Basic version





#### Universal stop PE small



nall	D28	D16	
A in mm	100	55	
B in mm	50	25	
C in mm	25	12	
Approx. weight in kg	0,72	0,08	
Description	Hardened steel	Burnished steel	
Item no.	E28-05002-000	E16-05002-000	





#### **Sliding stop**

DEMONT 760 M
BLACK EDITION

- Precision scaling on both sides
- Continuously adjustable with scale on both sides





#### Sliding stop, steel



	D28	D22	D16	
A in mm	150	150	150	
B in mm	50	50	25	
C in mm	25	18	12	
Approx. weight in kg	0,9	0,7	0,18	
Description	Hardened steel	Hardened steel	Burnished steel	
Item no.	D28-05015-000	D22-05015-000	D16-05015-000	

#### Sliding stop, aluminium



um	DZO	סוע
A in mm	150	150
B in mm	50	25
C in mm	25	12
Approx. weight in kg	0,28	0,06
Description	Aluminium	Aluminium
Item no.	D28-05015-003	D16-05015-001



#### **Universal stop PROFIEcoLINE large**



- Combination of system bore/oblong hole for numerous clamping options
- Basic version





#### Universal stop PE large



ge	D28	D16
A in mm	225	115
B in mm	50	25
C in mm	25	12
Approx. weight in kg	1,4	0,16
Description	Hardened steel	Burnished steel
Item no.	E28-05001-000	E16-05001-000

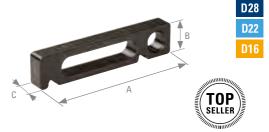




#### Universal stop large – with two notches



- Combination of system bore/oblong hole for numerous clamping options
- Precision adjustment using grid lines is possible thanks to precision scaling
- 360° adjustable position
- Additional notches for attachment, ideal as a corner stop
- Continuous adjustment via oblong hole



# Universal stop large, steel, with two notches

3

	D28	D22	D16
A in mm	225	225	115
B in mm	50	50	25
C in mm	25	18	12
Approx. weight in kg	1,32	1,1	0,14
Description	Hardened steel	Hardened steel	Burnished steel
Item no.	D28-05001-010	D22-05001-010	D16-05001-004

# Universal stop large, aluminium, with two notches



	D28	D16	
A in mm	225	115	
B in mm	50	25	
C in mm	25	12	
Approx. weight in kg	0,47	0,05	
Description	Aluminium	Aluminium	
Item no.	D28-05001-021	D16-05001-012	



Many installation and clamping options thanks to the combination of system bore and oblong hole. The universal stop can be set out every 45° using the oblong hole in the 25 mm grid and in the angle position.



#### Universal stop large – with four notches



- Combination of system bore/oblong hole for numerous clamping options
- Can be locked and fixed on five sides with PC bolt in a 25 mm grid in the table drilling pattern
- 360° adjustable positioning in 45° increments
- Continuously adjustable using the oblong hole





# Universal stop large, steel, with four notches



	D28	D22	D16
A in mm	225	225	115
B in mm	50	50	25
C in mm	25	18	12
Approx. weight in kg	1,2	1,0	0,14
Description	Hardened steel	Hardened steel	Burnished steel
Item no.	D28-05001-000	D22-05001-000	D16-05001-000

## Universal stop large, aluminium, with four notches



	D28	D16
A in mm	225	115
B in mm	50	25
C in mm	25	12
Approx. weight in kg	0,44	0,05
Description	Aluminium	Aluminium
Item no.	D28-05001-022	D16-05001-010



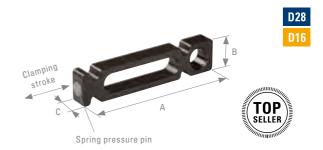




#### Universal stop large – with clamping bolt



- Combination of system bore/oblong hole for numerous clamping options
- Can be locked and fixed on five sides with PC bolt in a 25 mm grid in the table drilling pattern
- 360° adjustable positioning in 45° increments
- Continuously adjustable using the oblong hole
- With additional spring pressure bolt especially for clamping sheet metal and moulded parts, so that no additional fixing of workpieces is necessary



# Universal stop large, steel, with clamping bolt



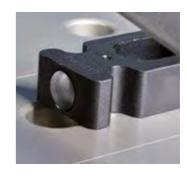
	D28	D16
A in mm	225	115
B in mm	50	25
C in mm	25	12
Approx. weight in kg	1,2	0,14
Clamping stroke in mm	3,5	2,0
Description	Hardened steel	Burnished steel
Item no.	D28-05001-001	D16-05001-001



# Universal stop large, aluminium, with clamping bolt



	D28	D16
A in mm	225	115
B in mm	50	25
C in mm	25	12
Approx. weight in kg	0,45	0,05
Clamping stroke in mm	3,5	2,0
Description	Aluminium	Aluminium
Item no.	D28-05001-020	D16-05001-011





#### Universal stop L 165 / L 300 / L 500



- Larger stop area than large universal stop
- Three or seven system bores
- For bridging larger locating surfaces
- As a lateral stop for large beams





Universal stop D28	D28				
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
223	300	50	25	1,8	D28-05009-000
11.5	F00	F.0.	25	0.00	D20 05000 000

Universal stop D28,	D28				
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
66	300	50	25	0,63	D28-05009-013
CHANGE	500	50	25	1,14	D28-05009-014

Universal stop D22	D22				
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
132	300	50	18	1,5	D22-05009-000
Ceces	500	50	18	3,3	D22-05009-008

Universal stop D16 l	D16				
_0	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
23.	165	25	12	0,22	D16-05009-000
	· ·				

Universal stop D16	D16				
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
44	165	25	12	0,07	D16-05009-010



For bridging larger distances.

**Typical potential applications** 



#### Stop bar



- Combination of system bore/oblong hole for numerous clamping options
- Very long and sturdy design, resulting in a large locating surface for large components or long distances
- Continuous adjustment via oblong hole



Stop bar D28, harder	D28				
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
	500	100	25	8,0	D28-05003-000
	800	100	25	13,0	D28-05003-001
	1000	100	25	16,48	D28-05003-008

Stop bar D28, alumin	D28				
(B) A	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
	500	100	25	2,78	D28-05003-016
All and	800	100	25	4,57	D28-05003-017
4	1000	100	25	5,76	D28-05003-018

Stop bar D22, hard	D22				
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
	500	100	18	6,0	D22-05003-000
•					

Stop bar D16, burni	D16				
	A in mm	B in mm	C in mm	Approx. weight in kg	ltem no.
	250	50	12	0,90	D16-05003-000
	400	50	12	1,48	D16-05003-001
-					

Stop bar D16, alumir	D16				
<i>.</i>	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
100	250	50	12	0,3	D16-05003-010
All the second	400	50	12	0,5	D16-05003-011



#### **Contour stop**

- Is used as a support element for lightweight workpieces
- Clamping via PC bolt and spacer washer from the support set
- · Cost-effective
- With 1 mm precision scaling





**Contour stop** 



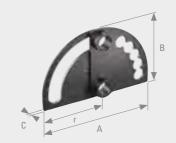
	DZ8	DIP
A in mm	325	187,5
B in mm	50	25
C in mm	6	6
Approx. weight in kg	0,85	0,1
Description	Hardened steel	Burnished steel
Item no.	D28-05016-000	D16-05016-000



#### **Angle-setting template**



- The angle-setting template is suitable for flexible use thanks to the 1° precision scaling on both sides
- Continuous 0-90°
- Fixed setting out 0-60°(15° increments)
- r = radius 125 mm





#### Angle-setting template D28, hardened steel



ate DZ8, nardeni	DZ6				
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.	
250	150	12	1,2	D28-05013-010	

#### Angle-setting template D16, burnished steel



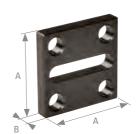
ate D16, burnis	D16				
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.	
150	87,5	12	0,45	D16-05013-010	



#### **Adapter plate**



• As an interface between the 3D system and individual components, i.e. for welding/screwing on special elements provided by the customer





A C

Adapter plate

	D28	D16
A in mm	150	75
B in mm	25	12
Approx. weight in kg	3,2	0,36
Description	Hardened steel	Burnished steel
Item no.	D28-05010-000	D16-05010-000



### Stop disc



- Can be used as a stop or support
- $\bullet\,$  Secured with PC bolt or connecting bush
- Continuous adjustment by turning (adjustment path A)
- Minimal space requirements





#### Stop disc D28, hardened steel



eneu steer					DEU
A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
50	75	25	1,2	Hardened steel	D28-05013-000
75	100	25	1,3	Hardened steel	D28-05013-001
50	75	25	1,3	Burnished steel	E28-05013-000

### Stop disc D22, harden



ened steel					D22	
A in mm	B in mm	C in mm	Approx. weight in kg	Description	ltem no.	
50	75	20	0,6	Hardened steel	D22-05013-000	

#### Stop disc D16, hardened steel



A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.	
37,5	50	12	0,17	Hardened steel	D16-05013-000	
62,5	75	12	0,38	Hardened steel	D16-05013-001	









# **DEMMELER®** supports

Overview and product benefits

178



Adjustment V-block page 179



Support set, 11-piece page 180



Support set, 9-piece page 181



Adjustable spacer/ threaded support page 179

Support set



with thread page 182



Support set with thread page 182



Support set, 11-piece page 180





V-block holder from page 187



Support set with thread

page 182



**Taper fitting** with thread

page 183





**Taper fittings** Ø 58 mm/ Ø 110 mm

from page 184



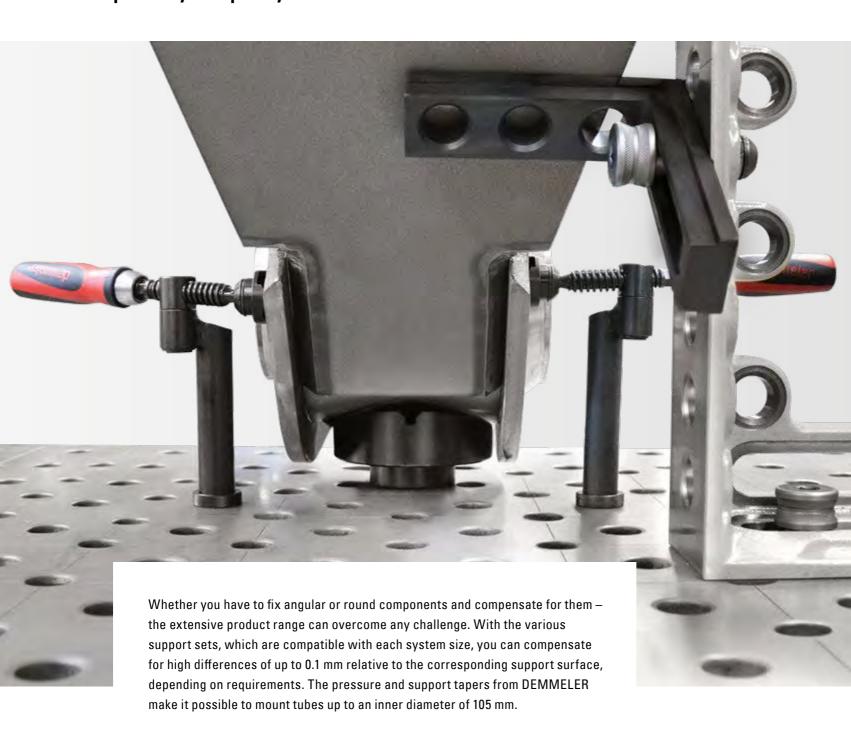
V-block holders

from page 186



# Precise positioning with the supports from DEMMELER

Always move your workpiece to the correct position precisely and quickly





#### **Adjustment V-block D28**

- Eccentric setting via sliding plate
- Flexible angle adjustment from 90° to 180°
- · Fixed at the required height with clamping bush
- · Synchronous adjustment via toothing







Adjustment V-block D28		D28
	A in mm	200
Ap	B in mm	100
	Approx. weight in kg	1,4
	Description	Adjustment V-block
Will be	Item no.	D28-09015-000



#### Adjustable spacer/threaded support D28

- The height of the support can be continuously adjusted from 75 to 95 mm
- · Especially well-suited to V-block holders with mounting mandrel for direct insertion in the adjustable spacer
- Stops, etc. can also be clamped in the system bore using a PC bolt





Adjustable spacer/threaded support D28		D28
	A in mm	75-95
	Ø B in mm	80
	Approx. weight in kg	2,50
	Description	With adjustment path A
	Item no.	D28-09009-000





#### Support set

- Height compensation in mm range
- Smallest increment 1 mm
- Including 1/10 inch disc (2.54 mm)
- With dimensions of the compensating discs
- · Mounting mandrel to fit any system bore
- Self-locking thanks to O-Ring
- Precise positioning at the required height using support sleeves of different lengths



Support set D28, 11-piece D28



- ullet To compensate for a 5 to 100 mm height difference relative to the corresponding support surface
- M12 thread on the top of the mounting mandrel available for customer-specific special elements on request

A in mm	Ø B in mm	Approx. weight in kg	Description	Item no.
120+5	28	1,96	11-piece support set	D28-09001-000
120+5	28	0,60	Individual support mandrel	
1	50	0,02	Support sleeve L1	
2	50	0,02	Support sleeve L2	
2,5	50	0,02	Support sleeve L2.5	
3	50	0,04	Support sleeve L2	
4	50	0,04	Support sleeve L4	
5	50	0,04	Support sleeve L4	
10	50	0,08	Support sleeve L10	
20	50	0,20	Support sleeve L20	
40	50	0,40	Support sleeve L20	
50	50	0,48	Support sleeve L20	

Support set D22, 11-piece D22



• To compensate for a 5 to 100 mm height difference relative to the corresponding support surface

A in mm	Ø B in mm	Approx. weight in kg	Description	Item no.
120+5	22	2	11-piece support set	D22-09001-000
120+5	22	0,38	Individual support mandrel	
1	50	0,01	Support sleeve L1	
2	50	0,02	Support sleeve L2	
2,5	50	0,03	Support sleeve L2.5	
3	50	0,04	Support sleeve L2	
4	50	0,05	Support sleeve L4	
5	50	0,06	Support sleeve L4	
10	50	0,12	Support sleeve L10	
20	50	0,24	Support sleeve L20	
40	50	0,47	Support sleeve L20	
50	50	0,59	Support sleeve L20	







Support set D16, 9-piece

D16

- To compensate for a 5 to 50 mm height difference relative to the corresponding support surface
- M8 thread on the top of the mounting mandrel available for customer-specific special elements on request



A in mm	Ø B in mm	Approx. weight in kg	Description	Item no.
55+5	16	0,220	9-piece support set	D16-09001-000
55+5	16	0,100	Individual support mandrel	
1	25	0,004	Support sleeve L1	
2	25	0,008	Support sleeve L2	
2,5	25	0,010	Support sleeve L2.5	
3	25	0,015	Support sleeve L2	
4	25	0,010	Support sleeve L4	
5	25	0,010	Support sleeve L4	
10	25	0,020	Support sleeve L10	
20	25	0,040	Support sleeve L20	

#### Support set with thread

- · Continuous height compensation
- As a support surface on system components or directly on the table
- · With 0.1 mm precision scaling
- · Max. load 500 kg
- Burnished
- Including M28 (D28)/M22 (D22)/M16 x 2 (D16) counter nut





D22



th thread	D28	D22	D16
A in mm	120	120	95
Ø B in mm	50	45	25
Adjustment distance in mm	22-105	20-100	20-75
Approx. weight in kg	0,8	0,53	0,22
Item no	D28-09001-005	D22-09001-005	D16-09001-005

# DEMMELER taper fitting with thread combined with the support set with thread

The combination of taper fitting with thread and the support set with thread offers various options for fixing and compensating for your components. With continuously adjustable height compensation, ideal as a point support and also suitable for mounting tubes on the inner diameter.





D28



#### Taper fitting D28 with thread

- Taper fitting with M12 threaded bolt
- For mounting tubes on the inner diameter combined with the support set with thread, item no.: D28-09001-005
- Securing workpieces using reference bores
- Also for use as a point support
- Diameter range Ø 5-55 mm



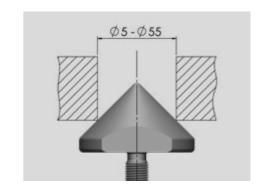
Taper fitting D28 with thread, har	
	A in mm
	Ø B in mm

D28
35
58
0,34
90°
Hardened steel
D28-09003-017





h thread, stainless steel	D28		
<b>A in mm</b> 35			
Ø B in mm 58			
Approx. weight in kg	0,34		
Angle	90°		
Description	Stainless steel		
Item no.	D28-09003-018		



Taper fitting D28 wit
(II)

D28
35
58
0,12
90°
Aluminium
D28-09003-019



#### Taper fitting D28, Ø 58 mm

- Pressure and support taper to hold tubes by the inner diameter
- Screwed in with countersunk screw
- Diameter range  $\emptyset$  5 55 mm



D28

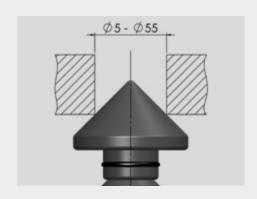
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Taper fitting D28,	Ø 58 mm, hardened steel	D28
	A in mm	35
	Ø B in mm	58
0/4/0	Approx. weight in kg	0,37
	Angle	90°
	Description	Hardened steel
	Item no.	D28-09003-011
	· · · · · · · · · · · · · · · · · · ·	



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Taper fitting D28, Ø 58 mm, stainless steel		D28
	A in mm	35
	Ø B in mm	58
	Approx. weight in kg	0,37
	Angle	90°
	Description	Stainless steel
	Item no.	D28-09003-012



Taper fitting D28, Ø 58

8 mm, aluminium	D28
A in mm	35
Ø B in mm	58
Approx. weight in kg	0,13
Angle	90°
Description	Aluminium
Item no.	D28-09003-013



#### Taper fitting D28, Ø 110 mm

- Pressure and support taper to hold tubes by the inner or outer diameter
- Screwed in with countersunk screw
- Inner diameter range: Ø 50 105 mm
- Outer diameter range: Ø 10 30 mm



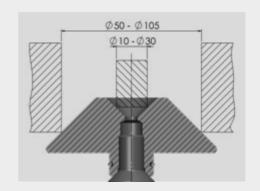


Taper fitting D28, £	ð 110 mm, hardened steel	D28
	A in mm	35
	Ø B in mm	110
	Approx. weight in kg	1,44
	Angle	90°
	Description	Hardened steel
	Item no.	D28-09003-014





Taper fitting D28, Ø	110 mm, stainless steel	D28
	A in mm	35
	Ø B in mm	110
	Approx. weight in kg	1,44
48.	Angle	90°
	Description	Stainless steel
	Item no.	D28-09003-015



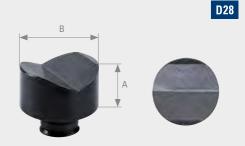


Taper fitting D28, &	ð 110 mm, aluminium	D28
	A in mm	35
	Ø B in mm	110
	Approx. weight in kg	0,49
40.	Angle	90°
	Description	Aluminium
	Item no.	D28-09003-016



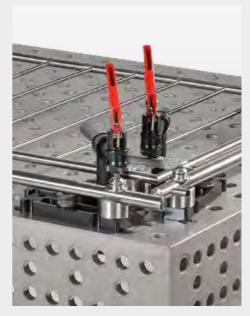
#### V-block holder D28, Ø 58 mm

- Precise mounting of tube elements
- Screwed in with countersunk screw
- For tube diameters up to 70 mm





0 58 mm, burnished steel	D28
A in mm	35
Ø B in mm	58
Approx. weight in kg	0,68
Angle	130°
Description	Burnished steel
Item no.	D28-09003-000





Ø 58 mm, stainless steel	D28
A in mm	35
Ø B in mm	58
Approx. weight in kg	0,70
Angle	130°
Description	Stainless steel
Item no.	D28-09003-002



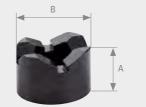
A in mm         35           Ø B in mm         58
Approx. weight in kg 0,14
Angle 130°
<b>Description</b> POM
Item no. D28-09003-001



#### V-block holder D16, Ø 50 mm

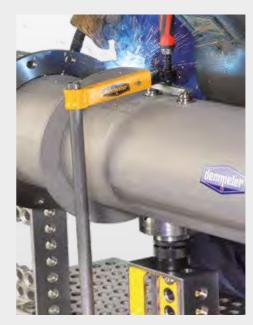
- Screwed in with a PC bolt
- With double V-block for more options
- Also suitable for rectangular tubes







V-block holder D1	6, Ø 50 mm, burnished steel	D16
	A in mm	35
	ØB in mm	50
	Approx. weight in kg	0,36
	Angle	120°/90°
	Description	Burnished steel
	Item no.	D16-09004-000





V-block holder D1	6, Ø 50 mm, stainless steel	D16
	A in mm	35
	Ø B in mm	50
-	Approx. weight in kg	0,38
	Angle	120°/90°
	Description	Stainless steel
	Item no.	D16-09004-002

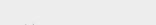


V-block holder D1	6, Ø 50 mm, POM	D16
	A in mm	35
13.00	Ø B in mm	50
	Approx. weight in kg	0,06
	Angle	120°/90°
	Description	POM
	Item no.	D16-09004-003

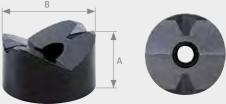


#### V-block holder D16, Ø 80 mm

- Screwed in with a PC bolt
- Double V-block for more options
- Also suitable for rectangular tubes



D16





80 mm, burnished steel	D16
A in mm	50
Ø B in mm	80
Approx. weight in kg	1,46
Angle	120°/90°
Description	Burnished steel
Item no.	D16-09003-000





V-block holder D1	6, Ø 80 mm, stainless steel	D16
	A in mm	50
-	Ø B in mm	80
-	Approx. weight in kg	1,46
	Angle	120°/90°
	Description	Stainless steel
	Item no.	D16-09003-002



V-block holder D1	16, Ø 80 mm, POM	D16	
	A in mm	50	
	Ø B in mm	80	
	Approx. weight in kg	0,22	
	Angle	120°/90°	
	Description	POM	
	Item no.	D16-09003-003	



#### V-block holder D28, Ø 80 mm with mounting mandrel

- With threaded support tower
- For tube diameters up to 100 mm
- · Also suitable for rectangular tubes
- Double V-block for more options
- Height adjustment via support sleeves for mounting mandrel (page 180) or continuous adjustment using D28-09001-005 support set with thread (page 182) or with D28-09009-000 adjustable spacer (page 179)





V-block holder D28, Ø 80 mm, burnished steel		D28
	A in mm	180
	Ø B in mm	80
	C in mm	60
	Approx. weight in kg	2,16
	Angle	90°/90°
	Description	Burnished steel
	Item no.	D28-09004-000





v av mm, stainiess steei	D28
A in mm	180
Ø B in mm	80
C in mm	60
Approx. weight in kg	2,18
Angle	90°/90°
Description	Stainless steel
Item no.	D28-09004-003



0 80 mm, POM	D28
A in mm	180
Ø B in mm	80
C in mm	60
Approx. weight in kg	0,88
Angle	90°/90°
Description	POM
Item no.	D28-09004-001



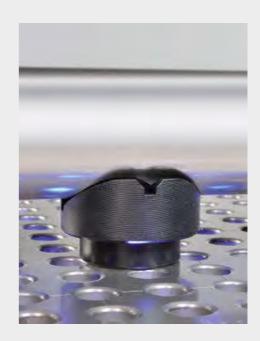
#### V-block holder D28, Ø 110 mm with mounting mandrel

- Precise mounting of tube elements
- With threaded support tower
- For tube diameters up to 180 mm
- Double V-block for more options
- Height adjustment via support sleeves for mounting mandrel (page 180) or continuous adjustment using D28-09001-005 support set with thread (page 182) or with D28-09009-000 adjustable spacer (page 179)





V-block holder D28, Ø 110 mm, burnished steel		D28
Y	A in mm	190
	Ø B in mm	110
	C in mm	70
	Approx. weight in kg	3,70
	Angle	120°/90°
	Description	Burnished steel
	Item no.	D28-09005-000





Ø 110 mm, stainless steel	D28
A in mm	190
Ø B in mm	110
C in mm	70
Approx. weight in kg	3,82
Angle	120°/90°
Description	Stainless steel
Item no.	D28-09005-002



Ø 110 mm, POM	D28
A in mm	190
Ø B in mm	110
C in mm	70
Approx. weight in kg	1,10
Angle	120°/90°
Description	POM
Item no.	D28-09005-001



#### V-block holder D28, Ø 140 mm with mounting mandrel

- Precise mounting of tube elements
- With threaded support tower
- For tube diameters up to 400 mm
- Double V-block for more options
- Height adjustment via support sleeves for mounting mandrel (page 180) or continuous adjustment using D28-09001-005 support set with thread (page 182) or with D28-09009-000 adjustable spacer (page 179)





V-block holder D28, Ø 140 mm, burnished steel		D28
	A in mm	190
	Ø B in mm	140
	C in mm	70
	Approx. weight in kg	5,22
	Angle	140°/90°
	Description	Burnished steel
	Item no.	D28-09006-000





0 140 mm, stainless steel	D28
A in mm	190
Ø B in mm	140
C in mm	70
Approx. weight in kg	5,30
Angle	140°/90°
Description	Stainless steel
Item no.	D28-09006-002



ð 140 mm, POM	D28
A in mm	190
Ø B in mm	140
C in mm	70
Approx. weight in kg	1,32
Angle	140°/90°
Description	POM
Item no.	D28-09006-001



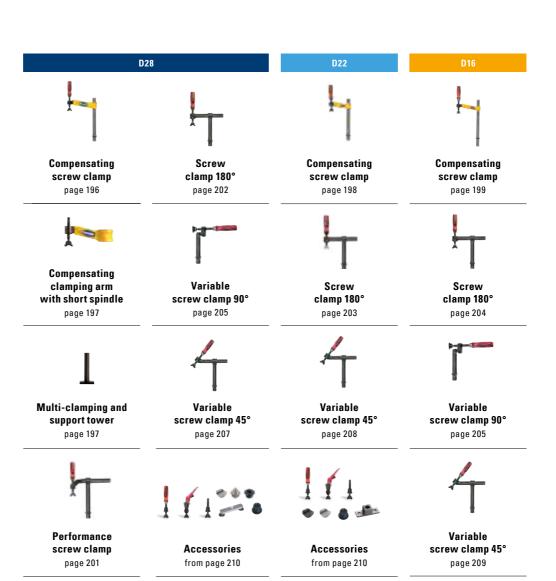






## **DEMMELER®** clamps

Overview of clamps	194
Product benefits of the performance screw clamp	200
Quick-release toggle clamp, pneumatic toggle clamp and accessories	222



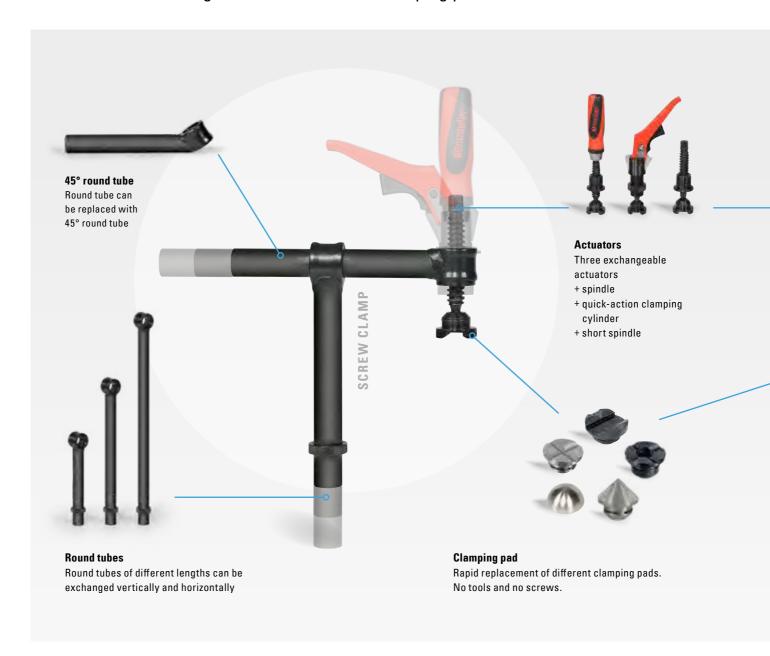


Accessories from page 210



### Flexible down to the details

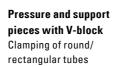
Configure your clamp – from the length of the round tubes and the actuator through to the choice of the clamping pad



#### Clamping pad: The right support for every workpiece







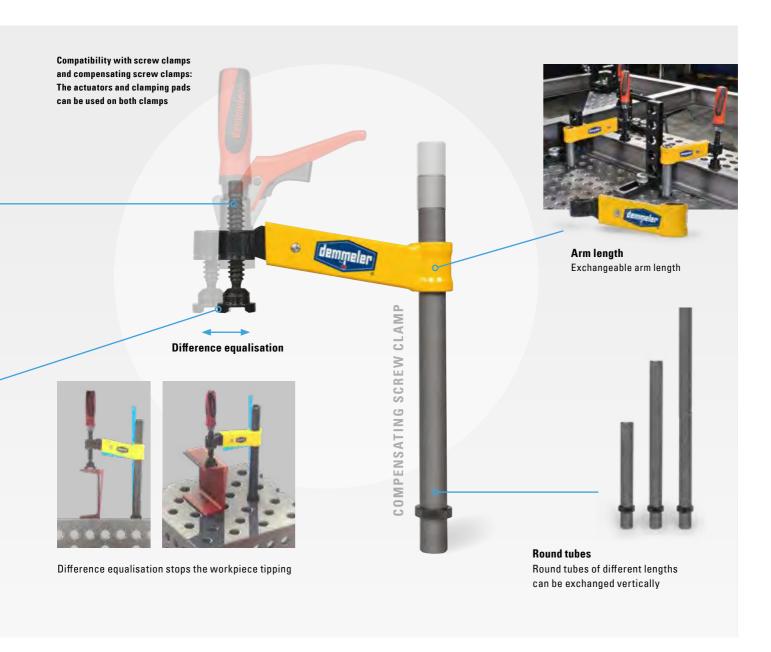




Clamping pad with spherical shape Clamping of corner profiles



Thanks to the modular design, the clamps also adapt perfectly to different clamping situations. Choose from various materials for the clamping pad and different spindle lengths, also for small installation spaces. The latch lever makes quick and precise clamping possible using one hand.  $With three \ different \ tube \ lengths \ and \ exchangeable \ arms, you \ can \ handle \ any \ clamping \ task.$ 









**Pressure and support** pieces with taper Clamping of tubes with a diameter of 10-58 mm

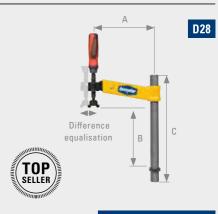




positions

#### **Compensating screw clamp D28**

- For fast, powerful and accurately positioned clamping of many different workpieces
- · For profiles that tend to tip
- With difference equalisation for accurately oriented and positioned workpiece clamping
- · With adjusting ring for setting the required height
- Exchangeable actuator (e.g. spindle, short spindle or quick-action clamping cylinder)
- Clamping pad can be exchanged for clamping other materials such as stainless steel
- Clamping pad as standard added value for your screw clamps
- Exchangeable clamping tubes, available in different lengths



#### Compensating screw clamp D28 with spindle



v clamp D28 with spindle			DZ8	
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
150	Max. 280	350	2,62	D28-07001-000
200	Max. 280	350	2,88	D28-07002-000

#### Compensating screw clamp D28 with quick-action clamping cylinder

D28



- Up to 5x faster clamping than with conventional screw clamps
- High clamping forces quickly and with little effort
- 360° swivelling lever avoids interfering edges
- Large clamping stroke: 9 mm

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
150	Max. 280	350	2,92	D28-07001-001
200	Max. 280	350	3,12	D28-07002-001

#### Compensating screw clamp D28 with short spindle

D28



- Operation with open-ended spanner WAF 13
- Highly recommended for confined spaces

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
150	Max. 280	350	2,54	D28-07001-002
200	Max. 280	350	2.74	D28-07002-002

#### Compatible system accessories

Exchangeable actuators
See page 210 onwards



Exchangeable taper and V-block holders See page 212 onwards

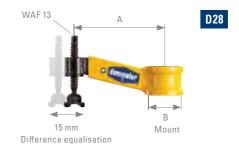






#### Compensating clamping arm with short spindle for heavy workpieces

- With difference equalisation for distortion-free workpiece clamping
- Used in combination with multi-clamping and support tower
- Very heavy-duty design
- Suitable for pre-tensioning heavy workpieces
- Fast and secure clamping
- Large adjustment range through combination with multi-clamping and support tower
- Clamping force approx. 20 kN
- Powder-coated



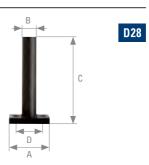
Compensating clamp	ing arm D28 with	short spindle
1	A in mm	B in mm

	-
- 497	

ping arm D28 with short spinale			DZO
A in mm	B in mm	Approx. weight in kg	Item no.
180	55	2,26	D28-05007-000

#### Multi-clamping and support tower

- For compensating clamping arm with short spindle
- Bolts to the table
- · Very sturdy design
- Can be combined with other system components, such as stops, thanks to the system bore



#### Multi-clamping and support tower D28

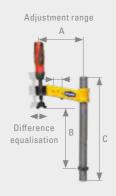


support tower D28				DZ0	
A in mm	B in mm	C in mm	D in mm	Approx. weight in kg	ltem no.
150	55	200	100	4,00	D28-05004-003
150	55	350	100	5,30	D28-05004-000
150	55	700	100	8,38	D28-05005-000
150	55	1000	100	11,00	D28-05006-000



#### **Compensating screw clamp D22**

- For fast, powerful and accurately positioned clamping of many different workpieces
- · For profiles that tend to tip
- With difference equalisation for accurately oriented and positioned workpiece clamping
- · With adjusting ring for setting the required height
- Exchangeable actuator (e.g. spindle, short spindle or quick-action clamping cylinder)
- Clamping pad as standard added value for your screw clamps



D22

#### Compensating screw clamp D22 with spindle

1

w clamp D22 with spindle				DZZ
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
125-150	Max. 210	300	1,5	D22-07001-000

#### Compensating screw clamp D22 with quick-action clamping cylinder

D22



- Up to 5x faster clamping than with conventional screw clamps
- High clamping forces quickly and with little effort
- 360° swivelling lever avoids interfering edges
- · Large clamping stroke

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
125-150	Max. 210	300	1.8	D22-07001-001

#### Compensating screw clamp D22 with short spindle

D22



- Operation with open-ended spanner WAF 10
- Highly recommended for confined spaces

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
125-150	Max. 210	300	1,3	D22-07001-002

#### Compatible system accessories

Exchangeable actuators
See page 210 onwards



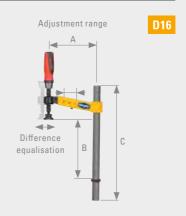
Clamping pad can be exchanged for a V-block See page 212





#### **Compensating screw clamp D16**

- For fast, powerful and accurately positioned clamping of many different workpieces
- · For profiles that tend to tip
- · With difference equalisation for accurately oriented and positioned workpiece clamping
- With adjusting ring for setting the required height
- Exchangeable actuator (e.g. spindle, short spindle or quick-action clamping cylinder)
- · Clamping pad can be exchanged for clamping other materials such as stainless steel
- Clamping pad as standard added value for your screw clamps
- Exchangeable clamping tubes, available in different lengths



#### Compensating screw clamp D16 with spindle



w Claim D to with spinute				D10
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
100-125	Max. 200	250	0,66	D16-07001-000

#### Compensating screw clamp D16 with quick-action clamping cylinder

D16



- Up to 5x faster clamping than with conventional screw clamps
- High clamping forces quickly and with little effort
- 360° swivelling lever avoids interfering edges
- Large clamping stroke: 3.5 mm

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
100-125	Max. 200	250	0.68	D16-07001-001

#### Compensating screw clamp D16 with short spindle

D16



- Operation with open-ended spanner WAF 14
- Highly recommended for confined spaces

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.	
100-125	Max. 200	250	0,6	D16-07001-002	

#### Compatible system accessories

Exchangeable actuators See page 210 onwards



Exchangeable spherical and V-block holders See page 212 onwards







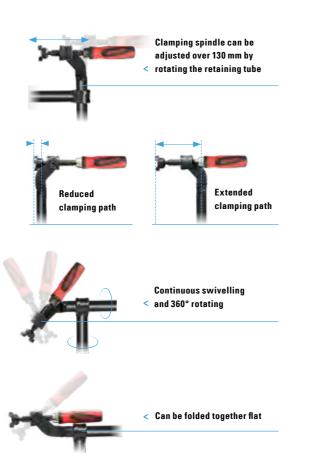




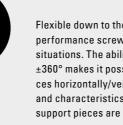
#### **NEW DESIGN**

#### HIGH PERFORMANCE - perfect handling with the **DEMMELER** performance screw clamp

Continuous swivelling. Rotation through 360°. Universal applications made easy!







xchangeabl spindle and

quick-action

clamping cylinder

Flexible down to the details. Thanks to its modular design, the performance screw clamp adapts perfectly to different clamping situations. The ability to continuously swivel and rotate through ±360° makes it possible to clamp round and rectangular workpieces horizontally/vertically and diagonally. Depending on the shape and characteristics of the item to be clamped, other pressure and support pieces are available for high-speed changeovers.

Spindle with

bushing and

Item no.

clamping pad

D28-07020-000

Short spindle

clamping pad

D28-07022-000

Item no.

with bushing and

Quick-action

Item no.:

clamping cylinder

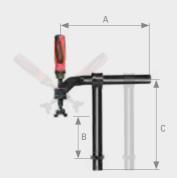
with clamping pad

D28-07021-004



#### Performance screw clamp D28

- Universally usable for the horizontal/vertical and diagonal clamping of workpieces
- Continuous swivelling and 360° rotating
- Adjustment range of clamping spindle over 130 mm by rotating the retaining tube without having to move the clamp (previous version: 68 mm)
- Can be folded together flat (less storage space required)
- With three exchangeable actuators (spindle, short spindle and quick-action clamping cylinder)



D28

#### Performance screw clamp D28 with spindle



CIAIIIP DZ6 WILII	DZO			
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
240	Max. 250	270	2,9	D28-07009-033

#### Performance screw clamp D28 with quick-action clamping cylinde



cramp D28 with quick-action cramping cylinder				
B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.	
Max. 250	270	2,6	D28-07009-035	
	B Clamp capacity in mm	B Clamp capacity in mm C in mm	B Clamp capacity in mm C in mm Approx. weight in kg	

#### Performance screw clamp D28 with short spindle



clamp D28 with	D28			
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
240	Max. 250	270	2,2	D28-07009-034

#### Typical potential applications



Confined spaces. The DEMMELER performance screw clamp allows simple clamping even in hard-to-reach places. At the same time, the clamping pad with V-block ensures central force distribution.



Accurately positioned clamping. The performance screw clamp always provides a secure hold, even when workpieces are clamped at an angle. With continuous swivelling and 360° rotation, it adapts to every clamping situation.



**Extended adjustment range.** Thanks to the new shape, it is possible to clamp nearby workpieces as well as workpieces at a greater distance from the next system bore without any hassle.



#### Screw clamp 180° D28

- With adjustable, robust round tube
- Each tube can be used individually
- · Adjustable projection
- · Can be inserted into system bores, eliminating unnecessary interfering edges
- · Highest force transmission thanks to sturdy round tubes
- Entire clamping mechanism is exchangeable



#### Screw clamp 180° D28 with spindle



28 with spina	ie			DZO
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
220	Max. 190	270	2,80	D28-07005-000
220	Max. 270	350	3,10	D28-07005-014
220	Max. 420	500	3,80	D28-07005-033

#### Screw clamp 180° D28 with quick-action clamping cylinder

D28



- Up to 5x faster clamping than with conventional screw clamps
- High clamping forces quickly and with little effort
- 360° swivelling lever avoids interfering edges
- Large clamping stroke: 9 mm

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
220	Max. 190	270	2,50	D28-07005-001
220	Max. 270	350	2,80	D28-07005-015
220	Max. 420	500	3,40	D28-07005-041

#### Screw clamp 180° D28 with short spindle

D28



- Operation with open-ended spanner WAF 13
- Highly recommended for confined spaces

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
220	Max. 190	270	2,10	D28-07005-002
220	Max. 270	350	2,30	D28-07005-016
220	Max. 420	500	3,00	D28-07005-036

#### Compatible system accessories

Exchangeable actuators
See page 210 onwards





Exchangeable taper and V-block holders See page 212 onwards





#### Screw clamp 180° D22

- With adjustable, robust round tube
- Each tube can be used individually
- · Adjustable projection
- Can be inserted into system bores, eliminating unnecessary interfering edges
- · Highest force transmission thanks to sturdy round tubes
- Entire clamping mechanism is exchangeable



#### Screw clamp 180° D22 with spindle

-	Ť
	ļ

υz	zz with spillule				DZZ	
	A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.	
	175	Max. 200	300	1,20	D22-07005-000	

#### Screw clamp 180° D22 with quick-action clamping cylinder





- Up to 5x faster clamping than with conventional screw clamps
- High clamping forces quickly and with little effort
- 360° swivelling lever avoids interfering edges
- Large clamping stroke

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
175	Max. 200	300	1,50	D22-07005-001

#### Screw clamp 180° D22 with short spindle

D22



- Operation with open-ended spanner WAF 10
- Highly recommended for confined spaces

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
175	Max. 200	300	2,10	D22-07005-004









#### Screw clamp 180° D16

- With adjustable, robust round tube
- Each tube can be used individually
- · Adjustable projection
- · Can be inserted into system bores, eliminating unnecessary interfering edges
- · Highest force transmission thanks to sturdy round tubes
- Entire clamping mechanism is exchangeable



#### Screw clamp 180° D16 with spindle



io with spinule	D10				
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.	
130	Max. 90	130	0,52	D16-07005-000	

#### Screw clamp 180° D16 with quick-action clamping cylinder

D16



- Up to 5x faster clamping than with conventional screw clamps
- · High clamping forces quickly and with little effort
- 360° swivelling lever avoids interfering edges
- Large clamping stroke: 3.5 mm

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
130	Max. 90	130	0.58	D16-07005-001

#### Screw clamp 180° D16 with short spindle

D16



- Operation with open-ended spanner WAF 14
- Highly recommended for confined spaces

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.	
130	Max. 90	130	0.50	D16-07005-002	

#### **Compatible system accessories**

Exchangeable actuators
See page 210 onwards



Exchangeable spherical and V-block holders See page 212 onwards









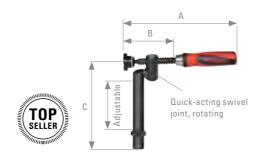




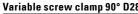


#### Variable screw clamp 90°

- Pressure direction 90° relative to the system bore
- $\bullet\,$  Spindle stroke approx. 70 mm
- 180° quick-acting swivel joint with ball locking device in the joint
- With adjusting ring for setting the required height
- Clamping bridges can be used
- Highest force transmission thanks to sturdy round tube
- Exchangeable clamping pad









ip 90° D28				D28
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
250	Max. 100	220	1,22	D28-07008-000
250	Max. 100	350	1,65	D28-07008-010
250	Max. 100	500	2,08	D28-07008-012

#### Variable screw clamp 90° D16



p 90° D16	D16			
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
150	Max. 40	150	0,30	D16-07008-000



# Perfect positioning on all locating surfaces

Thanks to the optimum effect of force with the DEMMELER 45° variable screw clamp.





#### Variable screw clamp 45° D28

- Highest force transmission thanks to sturdy round tubes
- Ideal for clamping V-block profiles, as well as rectangular and square profiles
- Entire clamping mechanism is exchangeable
- Perfect positioning on all locating surfaces thanks to optimum effect of force



D28

#### Variable screw clamp 45° D28 with spindle



IP 45° D28 WIT	DZδ			
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
220	Max. 190	270	2,80	D28-07009-000
220	Max. 270	350	3,00	D28-07009-011
220	Max. 420	500	3,70	D28-07009-026

#### Variable screw clamp 45° D28 with quick-action clamping cylinder D28

D28



- Up to 5x faster clamping than with conventional screw clamps
- High clamping forces quickly and with little effort
- 360° swivelling lever avoids interfering edges
- Large clamping stroke: 9 mm

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
220	Max. 190	270	2,50	D28-07009-001
220	Max. 270	350	2,70	D28-07009-012
220	Max. 420	500	3,20	D28-07009-027

#### Variable screw clamp 45° D28 with short spindle

D28



- Operation with open-ended spanner WAF 13
- Highly recommended for confined spaces

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
220	Max. 190	270	2,10	D28-07009-002
220	Max. 270	350	2,30	D28-07009-013
220	Max. 420	500	3,00	D28-07009-028

#### Compatible system accessories

Exchangeable actuators
See page 210 onwards



Exchangeable taper and V-block holders See page 212

onwards











#### Variable screw clamp 45° D22

- Highest force transmission thanks to sturdy round tubes
- Ideal for clamping V-block profiles, as well as rectangular and square profiles
- Entire clamping mechanism is exchangeable
- Perfect positioning on all locating surfaces thanks to optimum effect of force



#### Variable screw clamp 45° D22 with spindle



iip 43 DZZ With	DZZ				
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.	
175	Max. 200	300	1,20	D22-07009-000	

#### Variable screw clamp 45° D22 with quick-action clamping cylinder D28

D22

D22



- Up to 5x faster clamping than with conventional screw clamps
- High clamping forces quickly and with little effort
- 360° swivelling lever avoids interfering edges
- Large clamping stroke

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
175	Max. 200	300	1,50	D22-07009-001

#### Variable screw clamp 45° D22 with short spindle

D22



- Operation with open-ended spanner WAF 10
- Highly recommended for confined spaces

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
175	Max. 200	300	2,10	D22-07009-004

#### Compatible system accessories

Exchangeable actuators
See page 210 onwards



Clamping pad can be exchanged for a V-block See page 212





#### Variable screw clamp 45° D16

- Highest force transmission thanks to sturdy round tubes
- Ideal for clamping V-block profiles, as well as rectangular and square profiles
- Entire clamping mechanism is exchangeable
- Perfect positioning on all locating surfaces thanks to optimum effect of force



#### Variable screw clamp 45° D16 with spindle



A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
130	Max. 90	130	0,50	D16-07009-000

#### Variable screw clamp 45° D16 with quick-action clamping cylinder D28

D16



- Up to 5x faster clamping than with conventional screw clamps
- High clamping forces quickly and with little effort
- 360° swivelling lever avoids interfering edges
- Large clamping stroke: 3.5 mm

A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.
130	Max. 90	130	0,58	D16-07009-001

#### Variable screw clamp 45° D16 with short spindle

D16



- Operation with open-ended spanner WAF 14
- Highly recommended for confined spaces

	<u> </u>				
A in mm	B Clamp capacity in mm	C in mm	Approx. weight in kg	Item no.	
130	Max. 90	130	0.46	D16-07009-002	

#### Compatible system accessories

Exchangeable actuators
See page 210 onwards



Exchangeable spherical and V-block holders See page 212 onwards

















# With the exchangeable actuators for all round tube clamps:

- > Spindle
- > Quick-action clamping cylinder
- > Short spindle



#### Spindle with bushing and clamping pad

- High-quality two-component plastic handle
- · Long threaded spindle
- Threaded bushing can be used in any system bore
- Clamping pad can be exchanged and used as a support in any system bore
- Suitable for pre-tensioning workpieces
- Slip-proof handle thanks to rubberised inserts
- Clamping with standard hex wrench



bushing and cla	1 01			
A in mm	Ø B in mm	C in mm	Approx. weight in kg	Item no.
255	40	70	0.50	D28-07020-000

bushing and clar	nping pad			D22
A in mm	Ø B in mm	C in mm	Approx. weight in kg	Item no.
200	32	70	0,54	D22-07020-001
	A in mm		A in mm Ø B in mm C in mm	A in mm Ø B in mm C in mm Approx. weight in kg

ushing and cla	mping pad			D16
A in mm	Ø B in mm	C in mm	Approx. weight in kg	ltem no.
148	22	45	0.14	D16-07020-000



#### Quick-action clamping cylinder with clamping pad

- Up to 5x faster clamping than with conventional screw clamps
- The locking mechanism ensures controlled, fast and vibration-proof clamping
- Large clamping stroke
- The self-centring support and pressure piece clamps the workpiece and can be exchanged
- The powder-coated clamping lever has a highly ergonomic shape
- The plastic-coated, non-slip release lever ensures a secure grip when releasing the clamp



Quick-action clamping
<b>*</b>
*

ıng cylinder D28 w	D28			
A in mm	Ø B in mm	C in mm	Approx. weight in kg	Item no.
approx. 105+9	40	70	0,88	D28-07021-004

Quick-action clamping

ing cylinder D22 v	D22			
A in mm	Ø B in mm	C in mm	Approx. weight in kg	Item no.
approx. 90+9	32	70	0,60	D22-07021-001



vith clamping pa	d		D16
Ø B in mm	C in mm	Approx. weight in kg	Item no.
22	30	0,18	D16-07021-000
			Ø B in mm C in mm Approx. weight in kg

#### Short spindle with bushing and clamping pad

- Highly recommended for confined spaces
- Actuation with open-ended spanner WAF 13 (D28), WAF 10 (D22) or WAF 14 (D16)
- Direct use in system bores possible
- Ideal for pre-tensioning workpieces





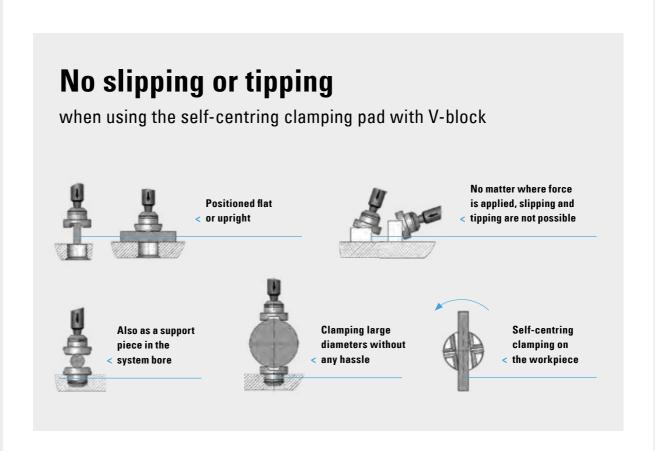
Short spindle D2	8 with bushing and c	lamping pad		D28
	A in mm	Ø B in mm	Approx. weight in kg	Item no.
Å	138	40	0,36	D28-07022-000

Short spindle	e D22 with bushing and c	lamping pad		D22
1	A in mm	Ø B in mm	Approx. weight in kg	ltem no.
Ā	110	32	0,20	D22-07022-000
T				

Short	spindl
	1

vitii busiiiiy aiiu c	D10		
A in mm	Ø B in mm	Approx. weight in kg	Item no.
70	22	0,10	D16-07022-000





#### Pressure and support piece/clamping pad with V-block

- Rapid replacement: No tools, no screws
- O-ring prevents dirt from getting into the joint
- Produced in various materials
- Precisely supported on the workpiece thanks to pendulum compensation
- With cross V-block for clamping round/rectangular tubes
- Can also be used as a support in any system bore







#### Clamping pad D28 with V-block, burnished steel



נוו ע-טוטטג, ט	urmaneu atee	1			DEU	
Ø A in mm	B in mm	C in °	Approx. weight in kg	Quantity	ltem no.	
40	15,5	120	0,112	1 unit	D28-07011-022	
40	15,5	120	1,12	10 units	D28-07011-023	

#### Clamping pad D28 with V-block, aluminium



itii V biook, u	· a · · · · · · · · · · · · · · · · · ·		520		
Ø A in mm	B in mm	C in °	Approx. weight in kg	Quantity	Item no.
40	15,5	120	0,04	1 unit	D28-07011-025
40	15,5	120	0,4	10 units	D28-07011-026



Clamping pad D22	with V-block, b	urnished stee	I			D22
-	Ø A in mm	B in mm	C in °	Approx. weight in kg	Quantity	Item no.
	32	8 ,0	120	0,05	1 unit	D22-07011-001

Clamping pad D22	with V-block, a	luminium				D22
	Ø A in mm	B in mm	C in °	Approx. weight in kg	Quantity	Item no.
	32	8,0	120	0,02	1 unit	D22-07011-000

Clamping pad D16	with V-block, b	urnished steel	l			D16
	Ø A in mm	B in mm	C in °	Approx. weight in kg	Quantity	Item no.
	22	8,0	120	0,1	1 unit	D16-07011-015
	22	8,0	120	1	10 units	D16-07011-016

#### Pressure and support piece

- Rapid replacement: No tools, no screws
- $\bullet\,$  O-ring prevents dirt from getting into the joint
- Produced in various materials
- Precisely supported on the workpiece thanks to pendulum compensation
- With cross V-block for clamping round/rectangular tubes
- Can also be used as a support in any system bore





D28
D16

Pressure and supp	ort piece D28, sta	inless steel		D28
	A in mm	Ø B in mm	Approx. weight in kg	ltem no.
	22	40	0,10	D28-07011-001

Pressure and supp	port piece D28, POI	И		D28
	A in mm	Ø B in mm	Approx. weight in kg	ltem no.
	22	40	0,02	D28-07011-002

Ai	in mm	Ø B in mm	Approx. weight in kg	ltem no.
13		22	0,02	D16-07011-000

Po.	A in mm	Ø B in mm	Approx. weight in kg	ltem no.
	13	22	0.02	D16-07011-001

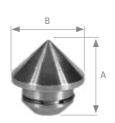
e and support pie	ece D16, POM			D16
A ii	n mm	Ø B in mm	Approx. weight in kg	Item no.
13		22	0,004	D16-07011-002



#### Pressure and support piece with taper

- Rapid replacement: No tools, no screws
- O-ring prevents dirt from getting into the joint
- Produced in various materials
- Precisely supported on the workpiece thanks to pendulum compensation
- With 90° taper to clamp tubes on the inner diameter Ø 10 58 mm



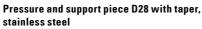


D28

Pressure and support piece D28 with taper, hardened steel

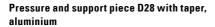
4	a.	
1		b
-	9	F

	D28
A in mm	40
Ø B in mm	40
Approx. weight in kg	0,16
Angle	90°
Description	Hardened steel
Item no.	D28-07011-027
	'





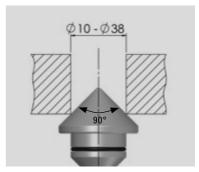
	D28
A in mm	40
Ø B in mm	40
Approx. weight in kg	0,16
Angle	90°
Description	Stainless steel
Item no.	D28-07011-028





	D28
A in mm	40
Ø B in mm	40
Approx. weight in kg	0,16
Angle	90°
Description	Aluminium
Item no.	D28-07011-029
	-







#### Clamping pad with spherical shape

- Rapid replacement without tools, without screws
- O-ring prevents dirt from getting into the joint
- Produced in various materials
- With ball, specially for clamping corner profiles
- Clamping pad compensates for angle errors
- Precisely supported on the workpiece thanks to pendulum compensation









Clamping pad D28/	D16 with spherical shape, burnished steel	D28	D16
	A in mm	21,5	13
	Ø B in mm	35	20
	Approx. weight in kg	0,09	0,02
	Description	Burnished steel	Burnished steel
	Item no.	D28-07011-004	D16-07011-005



i with spherical shape, stainless steel	D28	D16	
A in mm	21,5	13	
Ø B in mm	35	20	
Approx. weight in kg	0,09	0,02	
Description	Stainless steel	Stainless steel	
Item no.	D28-07011-005	D16-07011-006	



16 with spherical shape, POM	D28	D16	
A in mm	21,5	13	
Ø B in mm	35	20	
Approx. weight in kg	0,08	0,004	
Description	POM	POM	
Item no.	D28-07011-006	D16-07011-007	



Clamping pad D28	/D16 with spherical shape, aluminium	D28	D16
	A in mm	21,5	13
	Ø B in mm	35	20
AAA	Approx. weight in kg	0,035	0,02
	Description	Aluminium	Aluminium
	Item no.	D28-07011-020	D16-07011-012



#### Clamping pad, steel double-sided

- Rapid replacement: No tools, no screws
- O-ring prevents dirt from getting into the joint
- Precisely supported on the workpiece thanks to pendulum compensation
- With cross V-block for clamping round/rectangular tubes
- Can also be used as a support in any system bore
- Can be used on both sides



Clamping pad D28,	steel double-sided		D28	
	A in mm	Ø B in mm	Approx. weight in kg	Item no.
	25	40	0,08	D28-07011-010

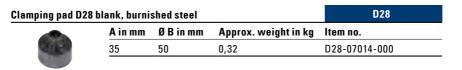


#### Clamping pad blank

- For customer-specific adaptation
- Mount for DEMMELER system screw clamps already present
- · Burnished steel



D28





amping pad D1	b blank, burnished steel			D16
	A in mm	Ø B in mm	Approx. weight in kg	Item no.
2012	25	22	0,05	D16-07014-000

#### **Adjusting spindle**

- For adjusting a continuous support
- Clamping in hard-to-reach positions

WAF 8 (D28) WAF 4 (D16)	\	
В		А
	I	

D28 **Adjusting spindle D28** A in mm B in mm Approx. weight in kg Item no. 255 0,78 D28-09008-000

A in mm	B in mm	Approx. weight in kg	Item no.
180	16	0,18	D16-09008-000







## 2P. Clamping bridge with two clamping pads, steel

- Two clamping points at the same time
- Clamping in hard-to-reach positions
- Simultaneous clamping of multiple components
- Clamping uneven surfaces or different heights through pendulum compensation
- Clamping pad distance can be shifted with self-locking ball pins
- Exchangeable clamping pad
- For attachment to any spherical mount
- Very stable shape
- Scope of delivery: Galvanised clamping bridge, two spherical pins and two clamping pads (steel)



2P. Clamping bridge	D28			
	A in mm	Ø B in mm	Approx. weight in kg	Item no.
A	130 / 97,5 / 65	35	0,56	D28-07018-000

### VARIO adjusting ring for screw clamp round tubes

- For fixing screw clamps at a set height
- Included in the scope of delivery for all round tube screw clamps

	D28
B	D16
	А

Adjusting ring VAR	D28			
	A in mm	Ø B in mm	Approx. weight in kg	Item no.
	10	28	0,05	D28-07003-000

Adjusting ring VA	D16			
	A in mm	Ø B in mm	Approx. weight in kg	Item no.
	6	16	0.01	D16-07003-000

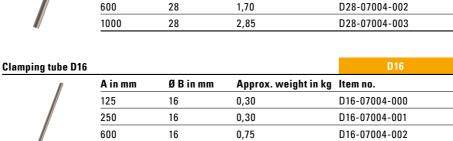


## **Clamping tube**

- Precision clamping tube to fit any system bore
- E.g. for compensating screw clamps (from page 196)



Clamping tube D28				
<i>III</i>	A in mm	Ø B in mm	Approx. weight in kg	Item no.
	200	28	0,57	D28-0700
	350	28	1,00	D28-0700
	600	28	1,70	D28-0700
//	1000	28	2,85	D28-0700





D28

D28-07004-000 D28-07004-001

D16-07004-003

# It doesn't get more modular than this.

1,20

Compatibility for tools from D28 | D22 | D16

16



#### Reducer bushing D16 to D28/D16 to D22

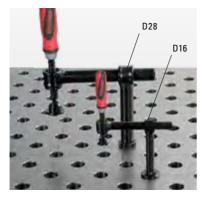
- Used to mount Ø 16 mm screw clamps in D28 and D22 system bores
- The D16 quick-action clamping cylinder can be used in system D28 or D22
- Can be used as a support or stop simultaneously

1000

• Threaded bushing for D28 or D22 screw clamp













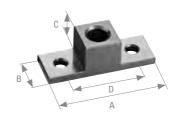
Reducer bushing D1	6 to D28					D16	D28
	A in mm	Ø B in mm	Ø C in mm	D in mm	Approx. weight in kg	ltem no.	
	30	28	16	25	0,10	D00-06012-000	

Reducer bushing D16 to D22 A in mm Ø B in mm Ø C in mm D in mm Approx. weight in kg Item no. D22-06012-000 28,5 22 16 25 0,07



## Interface plates

• Interface between system 28 and system 16 or system 28 and system 22



D28 D22

Interface plates for clamping tubes D28 to D16						D28	D16
	A in mm	B in mm	C in mm	D in mm	Approx. weight in kg	Item no.	
	150	50	50	100	1,04	D00-06015-000	

D28 D22 Interface plates for clamping tubes D28 to D22 A in mm B in mm C in mm D in mm Approx. weight in kg Item no. 150 100 D00-06015-001 50 50 1,2



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	5		-

Use clamps and V-blocks from system D28 in systems D22 and D16 too The interface plate makes it possible for you to use clamps and V-blocks from system D28 in systems D22 and D16 too.





# Angle bushing 90°

- Can be used as a corner stop
- Axis spacing 50 mm



Angle bushing 90°	D28			
	A in °	Ø B in mm	Approx. weight in kg	ltem no.
B. W.	90	28	0,30	D28-07034-000

# Deflector bushing with precision scaling in 15° increments

- User-friendly 360° precision scaling
- Especially useful when used with variable clamps (from page 226)
- Can also be used in combination with short or normal spindle with threaded bushing
- Axis spacing: 38 mm



D28

D28

Deflector bushing	D28			
	A in mm	Ø B in mm	Approx. weight in kg	ltem no.
	38	28	0,31	D28-07034-010

Deflector bushing 45	D28			
	A in mm	Ø B in mm	Approx. weight in kg	Item no.
	38	28	0,31	D28-07035-010







# Adapter tube

- Extension of support and clamping points
- Can be adapted with screw clamp tube
- Clamping on both sides possible with PC bolt





#### Adapter tube D28



A in mm	Ø B in mm	Approx. weight in kg	Item no.
100	28 / 40	0,40	D28-09010-000
200	28 / 40	1,05	D28-09010-001
300	28 / 40	1,70	D28-09010-002

#### Adapter tube D16



			שוט
A in mm	Ø B in mm	Approx. weight in kg	Item no.
100	16 / 28	0,34	D16-09010-000
200	16 / 28	0,80	D16-09010-001
300	16 / 28	1,20	D16-09010-002

# **Connecting sleeve**

- As a connecting piece between two clamping tubes
- As a connecting piece between the screw clamp and clamping tube
- Burnished



**Connecting sleeve D28** 



A in mm	Ø B in mm	Approx. weight in kg	Item no.
100	28 / 38	0,40	D28-07010-000

### Ball clamp bushing with countersunk head

- High-quality stainless steel pressure piston
- Self-locking in any position thanks to the O-ring
- 4 mm clamping stroke
- 120 N clamping force



D28

#### Ball clamp bushing D28 with countersunk head



J28 With Countersunk nead			DZ8	
A in mm	Ø B in mm	Description	Item no.	
43	28	with countersunk head	D28-07017-010	









# Quick-release toggle clamp Pneumatic toggle clamp

Quick-release

D28

toggle clamp



Vertical toggle clamp with adapter

page 228



D28



Pneumatic toggle clamp

page 231

Pneumatic toggle

clamp S

page 232



Quick-release toggle clamp

Variable clamp with adapter

page 226



Variable clamp with adapter

Variable clamp

with threaded bushing

page 226

page 226



toggle clamp with universal stop

page 229

Horizontal

toggle clamp

with universal stop

page 230



Manifold with

hand valve page 233





Adapter for quick-release toggle clamp page 230



Universal

variable clamp

page 227

Two-point clamp with adapter page 228



Adapter for quick-release toggle clamp page 230

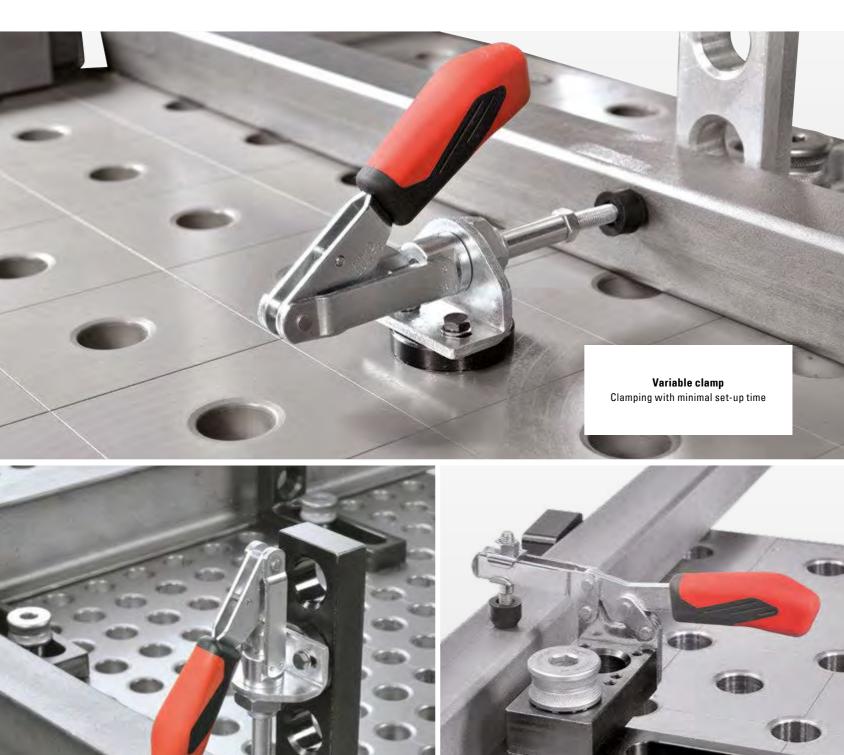


Pressure booster page 233



Magnetic clamps page 233









# **Quick-release toggle clamps from DEMMELER –** manual or pneumatic

DEMMELER's range of manual or pneumatic quick-release toggle clamps is diverse enough to perform a wide variety of applications. Our extensive range includes the ideal clamping element for any requirement. The products stand out due to their durability in particular. Alongside favourable force and movement conditions, all products are easy to use in everyday applications. The entire range of mechanical clamping elements is designed to consistently reduce complexity and optimise processes with fast and simple clamping options.





#### Variable clamp with threaded bushing

- Long push rod guide with mounting thread and nut
- Ergonomic, oil-resistant handle with large grip and soft component
- With tempered, galvanised clamping screw
- Including threaded bushing for use in system bores
- 32 mm stroke
- Galvanised and passivated clamp, burnished adapter



Variable clamp D28 with threaded bushing		D28
	A in mm	30
0-1	Ø B in mm	28
	Approx. weight in kg	0,4
	H1	110
	L1	140
	L3	129
	HW	22 - 35
	STROKE	32
	F1 in kN	2,5
	F2 in kN	2,5
	Item no.	D28-08000-000



### Variable clamp with adapter and countersunk screw

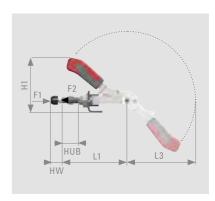
- Long push rod guide with mounting thread and nut
- Ergonomic, oil-resistant handle with large grip and soft component
- With tempered, galvanised clamping screw
- With adapter and countersunk screw to fit system bores
- Galvanised and passivated clamp, burnished adapter
- With universal stop for indirect mounting, therefore continuously adjustable



#### Variable clamp D28/D16

with adapter and countersunk screw		D28	D16
	A in mm	27	15
	Ø B in mm	50	38
	Thread pitch in mm	32 x 20	24 x 16
-	Approx. weight in kg	0,74	0,22
-	H1	110	60
	L1	140	91
	L3	129	72
	HW	22 - 35	12 - 20

27	15
50	38
32 x 20	24 x 16
0,74	0,22
110	60
140	91
129	72
22 - 35	12 - 20
32	20
2,5	1,0
2,5	1,0
D28-08002-000	D16-08002-000



**STROKE** 

F1 in kN

F2 in kN

Item no.









Variable clamp with threaded bushing

Variable clamp with adapter and countersunk screw

Universal variable clamp

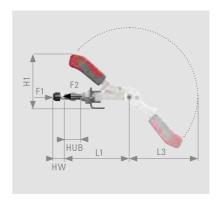
# Universal variable clamp (with universal stop)

- Long push rod guide with mounting thread and nut
- Ergonomic, oil-resistant handle with large grip and soft component
- With tempered, galvanised clamping screw
- 32 mm stroke
- $\bullet\,$  Including universal stop with thread for moving the variable clamp
- Galvanised and passivated clamp, burnished stop





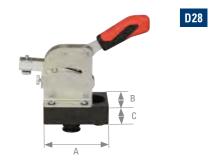
100	
50	
25	
1,08	
110	
140	
129	
22 - 35	
32	
2,5	
2,5	
D28-08001-010	
	50 25 1,08 110 140 129 22 - 35 32 2,5 2,5





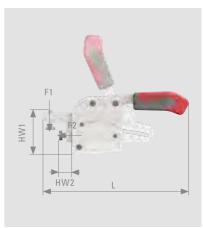
#### Two-point clamp with adapter

- Positioning and clamping in one process step: The combination clamp converts the movement of the lever arm into a horizontal and vertical clamping movement, so the workpiece is positioned and clamped simultaneously
- · Robust and stable design
- Easy removal of the workpiece by fully retracting the clamping arm
- With adapter to fit system bores, continuously adjustable
- Galvanised and passivated clamp, burnished adapter



å 3

Two-point clamp D28 with adapter		D28
	A in mm	100
	B in mm	70
	C in mm	30
2 3	Approx. weight in kg	1,8
	H1	94
	H2	87
	L1	219
	HW1	30 - 40
	HW2	10 - 20
	F1 in kN	2,0
	F2 in kN	2,0
	ltem no.	D28-08007-000



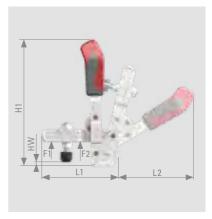
#### Vertical toggle clamp with adapter and countersunk screw

- With open support arm and horizontal leg
- Ergonomic, oil-resistant handle with large grip and soft component
- Safety clamping piece with finger guard
- Captive clamping screw at clamping arm end
- · With adapter and countersunk screw to fit any system bore
- Clamping range 0-50 mm (D28) or 0-25 mm (D16)
- · Galvanised and passivated clamp, burnished adapter
- With universal stop for indirect mounting, therefore continuously adjustable



#### Vertical toggle clamp D28/D16

with adapter and	countersunk screw	D28	D16
	A in mm	27	15
- A.M A	Ø B in mm	50	38
	Thread pitch in mm	32 x 20	24 x 16
Ta co	Approx. weight in kg	0,74	0,22
1	H1	186	98,5
*	L1	112	61
	L2	112	59
	HW	2 - 11	-4 - 2
	F1 in kN	1,1	0,6
	F2 in kN	2,5	1,1
	Item no.	D28-08001-000	D16-08001-000



D28



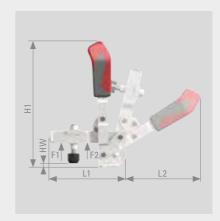
### Vertical toggle clamp with universal stop

- With open support arm and horizontal leg
- · Greased bearing points
- Ergonomic, oil-resistant handle with large grip and soft component
- Safety clamping piece with finger guard
- Captive clamping screw at clamping arm end
- Clamping range: 0-50 mm
- $\bullet\,$  Including universal stop with thread for moving the vertical toggle clamp
- Galvanised and passivated clamp, burnished adapter





Vertical toggle clamp D28 with universal stop		D28
	A in mm	100
•	B in mm	50
	C in mm	25
	Approx. weight in kg	0,98
	H1	186
	<u>L1</u>	112
	L2	112
	HW	2 - 11
	F1 in kN	1,1
	F2 in kN	2,5
	Item no.	D28-08003-010







### Horizontal toggle clamp with universal stop

- With open support arm and vertical leg
- Greased bearing points
- Ergonomic, oil-resistant handle with large grip and soft component
- With captive clamping screw
- Including universal stop with thread for moving the horizontal toggle clamp
- · Galvanised and passivated clamp, burnished stop





Horizontal toggle clamp D28 with universal stop		D28
	A in mm	100
	B in mm	50
	C in mm	25
	Approx. weight in kg	0,98
	H1	65
	L1	86
	L2	206
	HW	14,5 - 26
	F1 in kN	1,8
	F2 in kN	2,5
	Item no.	D28-08002-010



### Adapter for quick-release toggle clamp with countersunk screw

- Adapter to mount conventional quick-release toggle clamps
- · Scope of delivery:

1x adapter,

4x hexagon screw M6 x 12,

1x countersunk screw M16 x 30



Countersunk screw



ease toggie clamp D28/D16 with countersunk screw	D28	D16
A in mm	27	15
Ø B in mm	50	38
Thread pitch in mm	32 x 20	24 x 16
Approx. weight in kg	0,26	0,22
ltem no.	D28-08005-000	D16-08005-000

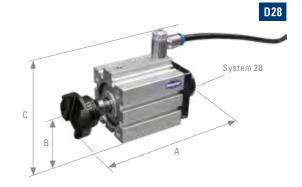






## Pneumatic toggle clamp XL

- Single-acting pneumatic cylinder
- With compression spring retraction
- Including manual gate valve
- Fits all D28 system bores thanks to the mount
- Including continuously variable length adjustment (adjustment distance approx. 40 mm)
- Clamping stroke: 25 mm
- Force: F6 = approx. 500 N at 6 bar, F8 = approx. 680 N at 8 bar



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Pneumatic toggle	Pneumatic toggle clamp D28 XL D28	
	A in mm	131,5
	Ø B in mm	53
	C in mm	87,2
	Approx. weight in kg	1,74
	Item no.	D28-13015-001





# Pneumatic toggle clamp S

- Single-acting pneumatic cylinder
- With compression spring retraction and 3/2-way valve
- Fits all D28 bores
- Stroke: 30 mm
- Force:

F6 = 41 N at 6 bar

F8 = 117 N at 8 bar

F10 = 193 N at 10 bar

F20 = 573 N at 20 bar

F30 = 953 N at 30 bar

F40 = 1146 N at 40 bar

• Recommended accessory: Pressure booster page 233

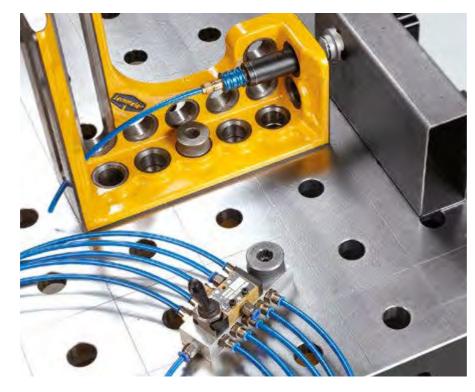


D28



amp D28 S	D28
A in mm	159
Ø B in mm	28
C in mm	34
Item no.	D28-13010-000





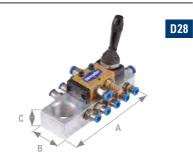






#### Manifold with hand valve

- 10-connection valve block with 1/8" non-return valve
- Hand valve: 3/2-way valve 1/8"
- Including 20 m tube



Manifold D28 with hand valve D28 C in mm A in mm B in mm ltem no. 130 40 D28-13020-000 25



#### **Pressure booster**

- For doubling or quadrupling the pneumatic clamping force: Pressure booster 2:1 max. 20 bar Pressure booster 4:1 max. 41 bar
- Including couplings and tubes



D28 Pressure booster D28



A in mm	B in mm	C in mm	Description	ltem no.	
150	50	65	2:1	D28-13020-001	
200	150	140	4:1	D28-13020-002	

### Magnetic clamp

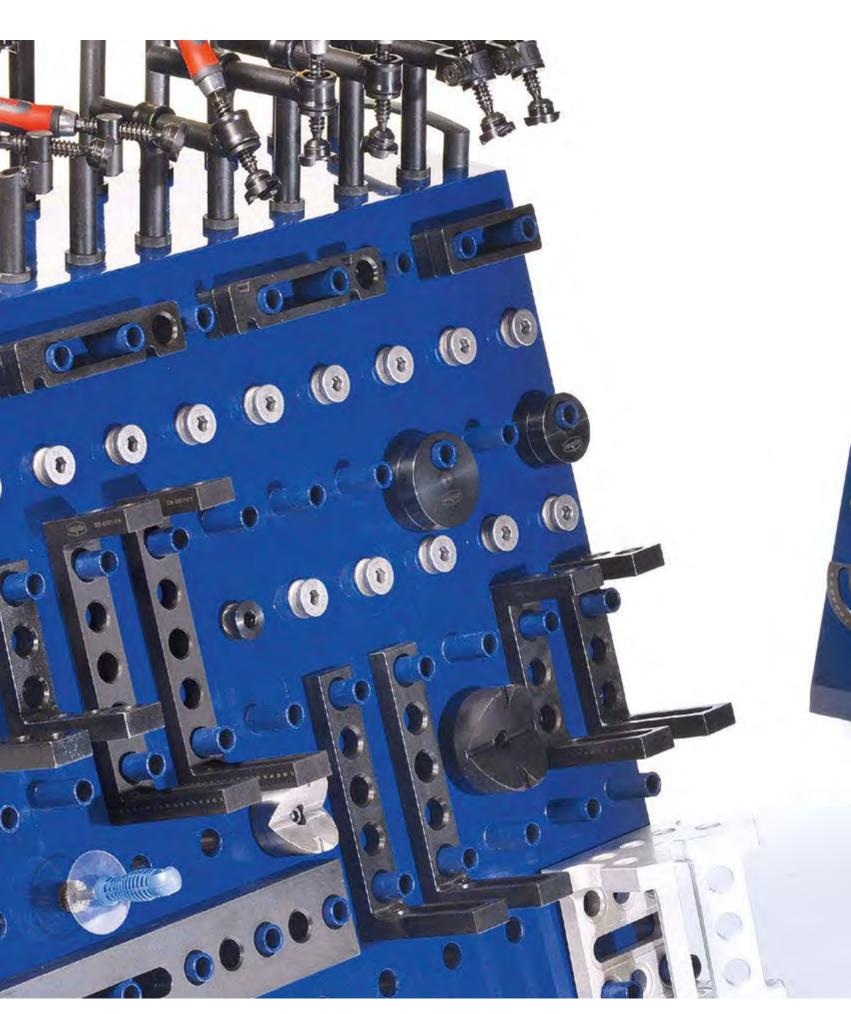
- Direct use in any system bore
- $\bullet\,$  Holding force approx. 70 N



D28 Magnetic clamp D28 Ø B in mm  $\boldsymbol{A} \text{ in } \boldsymbol{m} \boldsymbol{m}$ C in mm Approx. weight in kg Item no. 24 28 25 0,16 D28-13001-002 47 28 25 0,26 D28-13001-003



D28







# **DEMMELER®** system accessories

D28

Workplace organisation

236







page 241

Accessory cart page 242



Tarpaulin for accessory cart page 243



**Tool wall** page 244



Tools for clamping and releasing from page 244



Electric screwdriver including accessory package page 246



Protective spray from page 247



Cleaning/ maintenance from page 248





page 249

Transport ring page 251



clever toolbox page 238



Accessory cart page 242



Tools for clamping and releasing from page 244



Protective spray from page 247



Cleaning/ maintenance from page 248



Earth connection page 249



Transport ring page 251





smart toolbox page 241



Accessory carts from page 242



Tools for clamping and releasing from page 244



Protective spray from page 247



Cleaning/ maintenance from page 248



connection page 249



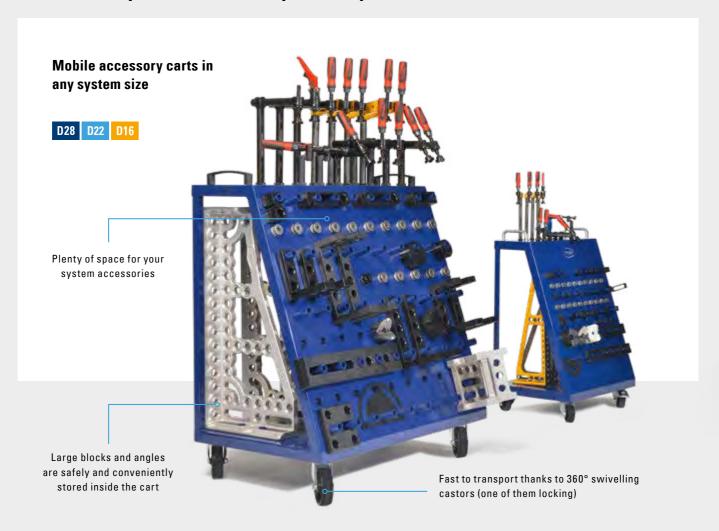
Transport ring page 251



# With the accessories from DEMMELER, your workplace is always perfectly organised

Workplace organisation is at least as important as precise tools. This ultimately offers almost unlimited potential. To ensure improved tidiness and organisation, DEMMELER's extensive range of table accessories is therefore available in all system sizes.

# To make sure your tools are always where you need them





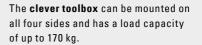
#### System accessories and consumables

We ensure that you can continue to extend your system throughout its entire service life. We can provide you with the right tools for easily clamping and releasing the clamping bolts and with care products that reduce material wear.



Practical drawer units offer a lot of storage space and protect your clamping accessories against dirt and weld spatter.







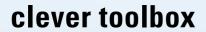
The smart toolbox is available with either two or three drawer elements and has a load capacity of up to 125 kg.













#### clever toolbox

clever toolbox D28					D28
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
The same	980	780	520	65	D28-11001-015



 $From \ a \ table \ size \ of \ 1000 \ x \ 1000 \ mm. \ The \ 3D \ welding \ table \ and \ system \ components \ are \ not \ included \ in \ the \ scope \ of \ delivery.$ 

#### clever toolbox D22



				D22
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
980	780	520	65	D22-11001-015

 $From \ a \ table \ size \ of \ 1000 \ x \ 1000 \ mm. \ The \ 3D \ welding \ table \ and \ system \ components \ are \ not \ included \ in \ the \ scope \ of \ delivery.$ 





### **Methodical organisation**



All blocks and angles can be stored in the grid system with locking bolts to save space.

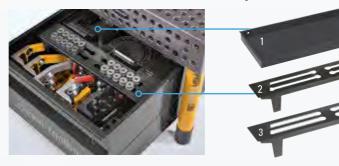


The "clever toolbox" can be mounted on all four sides and has a load capacity of up to 170 kg. Thanks to its ground clearance (10 cm), the "clever box" is readily accessible. The protective plate integrated under the table protects against dirt and weld spatter.



Locking bolts are not included in the scope of delivery.

# Can additionally be ordered as an option



(1) Universal box and (2) bolt cartridge for PPC and PC bolts, which can be removed and moved. (3) Bolt cartridge for ECO bolts. Not included in the scope of delivery.

Universal box* D	28/D22	D28	D22
	Item no.	D28-11001-017	D22-11001-017

 	* Dog/Dog	Doo	Doo

D28-11001-016

D28-11001-031

D22-11001-016

4		
Eco bolt cartridge* D28	D28	

Item no.

Item no.

Side locking bolt* D28/D22		D28	D22
n	Item no.	D28-11001-023	D22-11001-023

Locking bolts D28/D22, bottom		D28	D22
	Item no.	D28-11001-018	D22-11001-018
Л	-		

 $10\ locking\ bolts,$  bottom, are included in the scope of delivery.

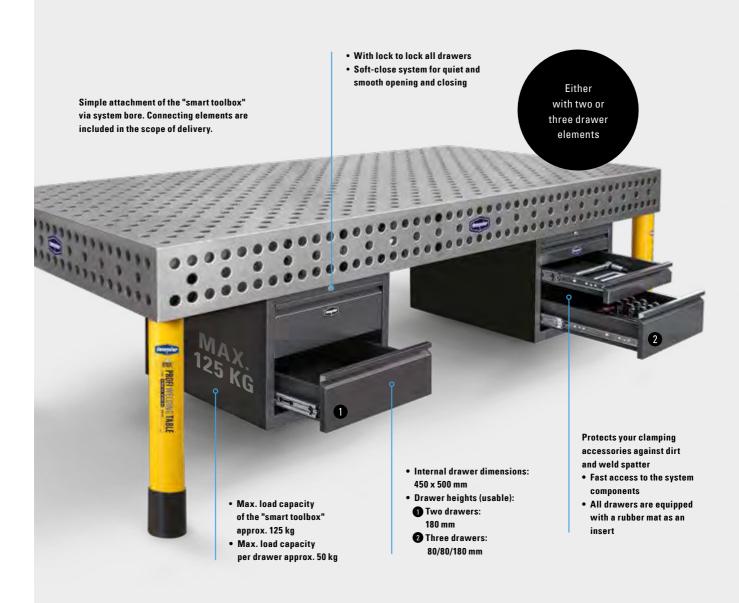
 $\ensuremath{^{*}}\mbox{Not}$  included in the scope of delivery. Can be ordered as an option.



# smart toolbox

Whether in the workshop or in the production hall, a practical organisation and storage system is needed wherever tools, equipment and small parts are used. The robust drawer units from DEMMELER made from precisely machined sheet steel perfectly meet this requirement. They are the ideal complement to the "clever toolbox". The robust design is able to support bearing loads of up to max. 125 kg. The closed body reliably protects tools and small parts against dirt and weld spatter. At the same time, the drawers of different heights make optimal use of the available space, offering generous storage space.

Both model versions can be flexibly combined depending on the system size – D16 and D28. This is how you can design your workspace to meet the requirements of your business.



D28



### smart toolbox

- The ideal complement to the "clever toolbox"
- Robust drawer base units made of sheet steel
- · Optionally with two or three drawer elements
- Generous storage space
- Reliably protects tools and small parts against dirt and weld spatter
- System components are not included in the scope of delivery





sma	art t	oolbo	x D28	3/D1
8				

16 – with two drawers				D28	D16	
A in mm	B in mm	C in mm	D in mm	Item no.	Item no.	
640	575	485	515	D28-11001-032	D16-11001-032	

- 8		
	-	
-		
-		

smart toolbox D28/D16 – with three drawers				D28	D16	
	A in mm	B in mm	C in mm	D in mm	Item no.	ltem no.
+	640	575	485	515	D28-11001-033	D16-11001-033

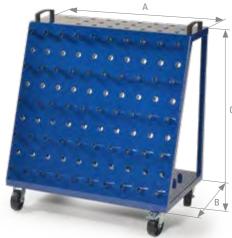






#### **Accessory cart**

- Creates a tidy and organised workspace
- Fast access to the system components
- Fast to transport thanks to four sturdy 360° swivelling castors, one of them locking
- System components are not included in the scope of delivery





Accessory cart D28					D28
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
	1000	650	1010	60	D28-11001-000



				DZZ
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
800	503	1068	55	D22-11001-000



				טוע	
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.	
600	450	870	35	D16-11001-002	

## Typical potential applications













D28



# **Tarpaulin for accessory cart D28**

- Very sturdy tarpaulin
- Protects your accessory cart against dirt and moisture
- Securely sewn at the corners
- Front with two robust zippers for removing the components at the front without having to take off the entire tarpaulin
- For D28-11001-000 accessory cart
- System components are not included in the scope of delivery





Tarpaulin for access	ory cart D28	D28		
	A in mm	B in mm	C in mm	Item no.
The same	_	_	_	D28-11001-020

# **Tool trolley D16**

- Creates a tidy and organised workspace
- Fast access to the system components
- Four closed drawers protect the contents against dirt
- Lockable
- Mobile on four sturdy castors, two of them swivelling and locking



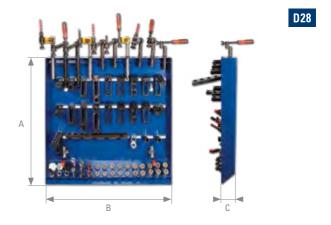


Tool trolley D16					D16
	A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
	740	560	970	<del>-</del>	D16-11001-000



#### Tool wall for mounting on the wall or table

- Creates a tidy and organised workspace
- The tool wall can either be mounted on the table with two D28-06001-000 PC bolts (see page 122) or on the wall
- System components are not included in the scope of delivery



 Tool wall D28

 A in mm
 B in mm
 C in mm
 Approx. weight in kg
 Item no.

 1010
 1000
 105
 45
 D28-11001-010



# Clamping and releasing made easy.

#### **Assembly lever**

- Suitable for clamping and releasing PC and PPC bolts, for example
- For easy removal of PC bolts and PPC bolts
- Handle simultaneously used for pre-centring



Assembly lever D28	B/D22	D28	D22
30	A in mm	250	250
	B in mm	45	45
	Approx. weight in kg	0,72	0,72
	Item no	D00-10016-001	D22-10016-001





# Hex key

- For PC bolt and compensating clamping arm with hexagon head
- Good accessibility thanks to additional ball head





Hex key D28	
<b>\</b>	

				520
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
104	WAF8	42	0,06	D28-10008-005
112	WAF 10	55	0,10	D28-10008-001
150	WAF 14	69	0,26	D28-10008-000



Hex key D22	
	/

				DZE
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
112	WAF 10	55	0,10	D22-10008-001

HEY	KEY	טוט



A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
71	WAF4	25	0,01	D16-10008-002
94	WAF 6	38	0,02	D16-10008-001
104	WAF8	42	0,06	D16-10008-000
75	WAF 5	35	0,02	E16-10008-000

# Hex key with cross-handle

• Ergonomic handle for optimum tightening





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			-	
	_			

Hex key D28 with c	D28			
	A in mm	B in mm	Approx. weight in kg	Item no.
-	150	WAF8	0,12	D28-10008-004
	200	WAF 10	0,18	D28-10008-003

пехн	tey D	ZZ WI	uic	IU
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oss-handle	DZZ			
A in mm	B in mm	Approx. weight in kg	ltem no.	
200	WAF 10	0,18	D22-10008-003	



#### Electric screwdriver with quick-change coupling for the PPC bolt and accessories

- DeWALT 12 volt/2 AH electric screwdriver with three torque settings to choose from (fine, medium, strong), adapted to the new form-fitting DEMMELER quick coupling
- A longer runtime per battery charge and a very high torque (max. 168 Nm) with extremely compact dimensions and a very low weight
- The new professional 3/8" quick-change coupling from DEMMELER, suitable for PPC bolts with WAF 14 (alternatively also for PPC bolts with WAF 10)
- Hardened reducer bushing from WAF 14 to WAF 13 for tightening and releasing the short spindle from screw clamps, etc.
- D28 mm cleaning brush attachment for efficiently cleaning the system bores
- · Practical carrying case for all accessories



#### Electric screwdriver including accessory package

D28



ncluding acc	essory package	D28
Quantity	Description	
1	DeWALT electric screwdriver including 1 battery charger + 2 batteries	
1	New professional 3/8" quick coupling for PPC bolts	
1	Hardened reducer bushing from WAF 14 to WAF 13	
1	Mounting fixture for easy installation of the clamping ring	
1	Manufacturer warranty/assembly information	
1	Carrying case for all accessories	
Quantity	Maintenance accessories	-
2	Cleaning brush attachment for system bore D28	
Quantity	Wearing parts	
20	O-rings compatible with PPC bolt D28	
15	Small polygonal elements compatible with PPC bolt D28	
10	Clamping rings compatible with PPC bolt D28	
Item no.	D28-13050-000	

Components of the accessory package are also available separately

#### **Typical potential applications**



Electric screwdriver of the latest generation with quick-change coupling for the PPC bolt: Clever form fit for safe and fast clamping and releasing of the patented PPC bolts with high torque.



User-friendly and effortless: The new DEMMELER system lock between the PPC bolt and impact screwdriver makes it possible to insert and tighten as well as loosen and remove the bolt using one hand.



Maintenance can be performed easily and efficiently on the table and system bores thanks to the rotating round brush attachment.



#### **Torque wrench**

- Preset to D28: 70 Nm, D22: 25 Nm, D16: 20 Nm for controlled tightening of the bolts, preventing damage to the system bore and bolts caused by over-tightening
- Inc. 1x convertible ratchet adapter (left, right) D28: 1/2", D16: 3/8" and 2x D28 sockets: WAF 8 and WAF 14, D22: WAF 8, D16: WAF 4 and WAF 8





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Torque wrench D28/D22/D16		D28	D22	D16
	A in mm	348	348	212
Co	B in mm	WAF 8 / WAF 14	WAF6/WAF8	WAF 4 / WAF 8
	Approx. weight in kg	0,76	0,8	0,52
	Item no.	D28-10015-000	D22-10015-000	D16-10015-000





# Protection and maintenance.

### Protective spray in a pump bottle

- · Pressurised, sturdy design
- Including protective spray for the welding table, capacity: 1 litre
- Attention: Cannot be diluted with water.

#### Benefits for you

- Prevents the adhesion of weld spatter on the surface
- Temporary corrosion protection for around one day
- · Good cleaning effect
- Non-flammable, biodegradable
- Does not contain solvents, silicone or VOC; does not require special labelling





## Protective spray in a pump bottle



A in mm	B in mm	Description	Item no.
280	100	Pump bottle without protective spray	D00-10004-000
280	100	Pump bottle with 1 litre of protective spray	D00-10005-000



### Protective spray in a canister

- Release agent for welding thin and/or pre-heated sheets and for multi-layer welding
- Protection for welding tables, system components, welding nozzles and other welding accessories
- Prevents the adhesion of weld spatter on the surface
- Temporary corrosion protection for around one day
- Good cleaning effect
- Non-flammable, biodegradable
- Does not contain solvents, silicone or VOC; does not require special labelling

#### Areas of application

• For welding steel, stainless steel and aluminium







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#### Protective spray in a canister



A in mm	B in mm	Description	ltem no.
230	200	5-litre canister	D00-10006-000
310	200	10-litre canister	D00-10006-001
400	350	30-litre canister	D00-10006-002

#### **Bench stone**

• To care for the system surfaces of welding tables and system components







D16

#### Bench stone



A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
200	50	25	0,56	D00-10007-000





### **Round brushes**

- For cleaning the system bores
- With splash guard



D28

D16

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				DZ8	
A in mm	B in mm	C in mm	Approx. weight in kg	ltem no.	
165	28	40	0.15	D28-10002-000	

#### **Round brush D22**



				022
A in mm	B in mm	C in mm	Approx. weight in kg	ltem no.
165	22	40	0,12	D22-10002-000

#### Round brush D16



				рть	
A in mm	B in mm	C in mm	Approx. weight in kg	Item no.	
165	16	40	0,10	D16-10002-000	

#### **Earth connection**

- Fits in any system bore
- 100% contact, therefore no overheating of the earth cable >> high efficiency
- For cable cross-section of 50–70 mm², for loads up to 355 A with 100% duty cycle,
   400 A with 60% duty cycle
- Simple and safe installation (without interfering edges)
- Compatible with commonly used earth cables





D40

#### **Earth connection**



Approx. weight in kg	ltem no.
0,34	D00-10009-000





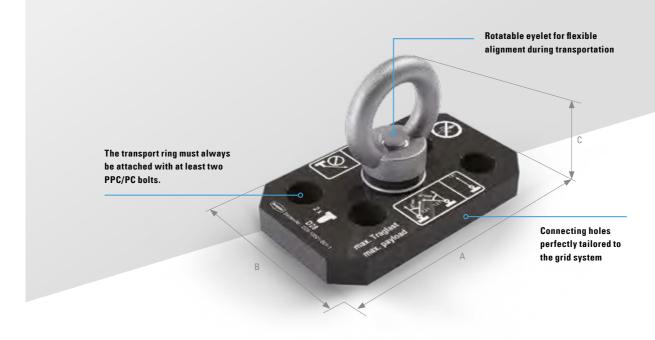
Fast, easy and safe transportation of all heavy system components (e.g. welding table)

# The transport ring for the **DEMMELER 3D clamping system.**









- The transport ring must always be attached with at least two DEMMELER PPC/PC bolts.
- · Countersunk bolts must not be used.
- Only use the transport ring for DEMMELER 3D systems.
- · Internal operating instructions must be observed.
- Only undamaged transport rings and PPC/PC bolts may be used.
- The transport ring must be fixed in the centre of the worktop. If two transport rings are used, these must be fixed symmetrically in the centre of the worktop. The maximum diagonal pulling angle must not exceed 45° (see warnings)
- The general regulations for means of transport must be observed when using the transport ring.
- Depending on the application, the load capacity may be significantly reduced.
- The transport ring may only be loaded in the ring plane. Do not exceed the load capacity.
- Do not stand underneath suspended loads.
- · Observe the warnings on the transport ring.

#### Max. transport weight in [t] for different attachment methods

Transport ring		<u>.</u>	
Tilt angle			0°-45°
Number of transport rings	1	2	2
D28 System D28	1.8 t	3.6 t	2.4 t
D22 System D22	1.8 t	3.6 t	2.4 t
D16 System D16	0.7 t	1.4 t	1.0 t



#### **Transport ring**







**Transport ring D28** 

D28



- The D28-10001-001 transport ring must always be attached with at least two DEMMELER PPC/PC bolts.
- Max. tightening torque for D28: 70 Nm (bolts are not included in the scope of delivery of the transport ring)
- Only undamaged transport rings and PPC/PC bolts may be used.

A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
200	120	129	4,7	D28-10001-001

#### **Transport ring D22**

D22



- The D22-10001-000 transport ring must always be attached with at least two DEMMELER PPC bolts.
- Max. tightening torque for D22: 25 Nm (bolts are not included in the scope of delivery of the transport ring)
- Only undamaged transport rings and PPC bolts may be used.

A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
200	120	130	4,1	D22-10001-000

#### **Transport ring D16**

D16



- The D16-1001-001 transport ring must always be attached with at least two DEMMELER PC bolts.
- Max. tightening torque for D16: 20 Nm (bolts are not included in the scope of delivery of the transport ring)
- Only undamaged transport rings and PC bolts may be used.

A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
200	120	84	2,8	D16-10001-001









# DEMMELER® COBOT WeldSpace 4.0®

Automated welding in shuttle operation 254
Equipment 256



COBOT WeldSpace 4.0® basic cell

from page 256

Configuration options



Work tables for basic cell page 258 Optional equipment options

Workspace extension



Equipment in SPACE A1/A2

page 259



Welding current sources for robotics applications

page 261

Welding systems



Equipment in SPACE B from page 259

7

Optional accessories from page 262



WeldSpace 4.0® software options page 265





# The new COBOT WeldSpace 4.0® welding cell from DEMMELER comes with everything you need.

In the future, advances in digitalisation and automation will also change the processes in welding production. Particularly in the manual welding of classic sheet metal components, the new technology – welding with collaborative robots – can eliminate the need for valuable skilled workers to perform tiring routine and repetitive tasks. With the COBOT WeldSpace 4.0® from DEMMELER, even small and medium-sized companies can get to grips with automated and professional welding production in next to no time thanks to the fast commissioning and extremely simple programming. Whether individual parts, parts from series production, or small batch sizes with a large variety of parts, you save time in welding and reworking. The fully equipped welding cell with welding robot and welding technology offers unique modularity and flexibility in the smallest possible space with four possible workspaces – SPACE A, A1–A2 and Space B.



# Four workspaces with perfect accessibility from all sides. Well-equipped with high-quality components and premium equipment.



The standard shuttle operation between the SPACE A and SPACE B workspaces with optional subdivision of the SPACE A workspace into A1 and A2 enables set-up, reclamping and welding to be performed in parallel. Depending on requirements, the SPACE B workspace can optionally be equipped with another DEMMELER 3D welding table with a maximum size of 2000 x 1000 mm or with a two-axis manipulator with a load capacity of up to 500 kg. This enables highly productive welding in the flat position.

### **Basic equipment**

### **Universal Robots UR e-Series**

Latest UR10e collaborative robot with six axes and force torque sensor mounted overhead on the support structure.

### **DEMMELER WeldSpace 4.0® software**

Almost everything can be programmed with just three buttons on the multi-function handle.

### **DEMMELER 3D** welding table

Available in all system sizes D16, D22 or D28 from DEMMELER.

#### **Central control unit**

The user interface of the WeldSpace 4.0® software guides you step by step to perfect welding results.

#### Shuttle operation parallel to main time

Shuttle operation between two large workspaces (SPACE A and SPACE B) parallel to main time as standard

#### Movable gantry makes crane loading possible

Workpieces are easily loaded for set-up and reclamping, including by crane.

# **Special equipment**

### Two-axis manipulator

Modular two-axis manipulator with a load capacity of up to 500 kg for professional workpiece clamping and circumferential seam welding with the rotary axis.

#### Integrated and professional

## high-performance welding system

Fronius robot welding equipment

### **Torch cleaning station**

Optimum and reliable cleaning of the gas nozzle ensures a reliable welding process and increases system availability.

### Welding fume extraction system

Connection of a mobile or central welding fume extraction system.

### Network camera

Check and document welding results by means of live transmission and videos. Access and control using a robust industrial tablet with preinstalled Fronius WeldConnect app.



# The complete package for a quick and professional introduction to automated welding

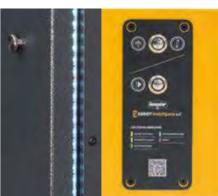








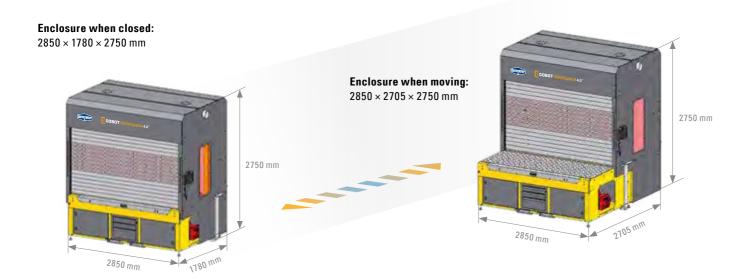




# COBOT WeldSpace 4.0® - basic equipment

- Ready-to-operate cell with two large workspaces SPACE A and
  SPACE B.
- Automatically moving protective enclosure with two roller shutter doors (aluminium cladding with viewing elements made of protective welding glass)
- UR10e collaborative welding robot (mounted overhead). Not to be confused with the approx. € 6000 cheaper UR10 (old model).
   The UR10e offers the highest accuracy and reliability with maximum sensitivity. Eliminate the need for your staff to perform dirty, dangerous and monotonous work and increase productivity by saving time.
- UR control panel
- DEMMELER WeldSpace 4.0® software. Specially developed software with many functions which together with the innovative three-button handle takes the hassle out of creating complex welding programs. The software guides the operator intuitively through the menu and with the three-button handle, waypoints and spot welds
- can be transferred directly into the program. Planes can also be selected on the three-button handle to facilitate precise positioning at the selected point. Other functions such as FREEDRIVE (free movement of all axes), LIN (movement in one plane) and ROT (rotate around the ToolCenterPoint TCP) are a matter of course. An extensive job library that can be expanded at any time, in which parameters and characteristic curves for typical welding applications are stored, leads to the perfect welding result.
- Enabling button
- · Smart toolbox with three lockable drawers
- Forklift pockets for easy transport
- Gas cylinder holder for up to two gas cylinders
- Connection options for a central production facility exhaust system on the left or right side and two at the top of the system
- LED strips on all side corners signify processes and machine statuses
- 3D work tables available in versions D16, D22 and D28





# COBOT WeldSpace 4.0® basic cell





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•	•	

Dimensions	2850 x 1780 (2705 mm) x 2750 mm
Weight	Approx. 2325 kg
Electrical data	
Feed-in	3x 400 V/N/PE
Frequency	50 Hz
Operating voltage	400 V
Control voltage	24 V DC
External fuse	Max. 32 A slow-blow (up to 400 A welding current)
Rated current	30 A
Workspace SPACE A	
Dimensions	2300 x 875 x 1100 mm
Typical workpiece size	Workpiece size depends on workpiece geometry and welding torch accessibility
Max. load	3000 kg
COBOT UR10e series	•
Туре	Collaborative industrial robot arm
Number of axes	6
Load capacity	12.5 kg
Weight	33.5 kg
Working radius (ceiling mounting)	1300 mm
Repeatability	± 0.05 mm
Workspace SPACE B	
Dimensions	2300 x 1500 x 1750 mm
Typical workpiece size	Workpiece size depends on workpiece geometry and welding torch accessibility
Max. load	Floor load
Item no.	00203831



# Choose your system size for the work table in SPACE A



PACEA

## 3D welding table

- Only in conjunction with the 00203831 basic cell
- Hardened version DEMONT 760 M
- · All system bores with protective countersink and ultimate functionality
- · Precision scaling with millimetre graduation
- Coordinate marking of the bores in the X and Y directions
- Including mounting kit for COBOT WeldSpace 4.0® basic cell and sheet metal cladding







D II

### COBOT WeldSpace 4.0® 3D welding table D28 PROFIPremiumLINE (PP)

- Worktop with D28 system bores in a 50 x 50 mm grid
- Grid lines in X and Y alignment, 100 mm spacing throughout

A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
2400	1200	200	824	50 x 50 mm grid	00162637

### COBOT WeldSpace 4.0® 3D welding table D22 PROFIPremiumLINE (PP)

D22

D28



- Worktop with D22 system bores in a 50 x 50 mm grid
- Grid lines in X and Y alignment, 100 mm spacing throughout

A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
2400	1200	150	535	50 x 50 mm grid	00162638

## COBOT WeldSpace 4.0® 3D welding table D16 PROFIEcoLINE (PE)

D16



- Worktop with D16 system bores in a 50 x 50 mm grid
- Grid lines in X and Y alignment, 50 mm spacing throughout

A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
2400	1200	100	347	50 x 50 mm grid	00162639

# Equipment options to extend SPACE A into SPACE A1/A2

With this extension set, the SPACE A workspace can optionally be divided in the centre into two workspaces – SPACE A1 and SPACE A2. This makes it possible to operate the welding cell in three-station mode.

Additional roller shutter doors 3 and 4 with viewing elements

Partition wall





# Workspace A1/A2

- Two additional roller shutter doors (aluminium cladding with viewing elements made of welding protection glass) for workspaces A1 and A2
- Fast and easy-to-install partition wall (dimensions: A 935 x B 150 x C 1300 mm, weight: 18.5 kg)
- Automatic detection of the partition wall by the control system
- Dimensions per Workspace 1000 x 865 x 1100 mm
- Max. load per Workspace 1500 kg







SPACE

### COBOT WeldSpace 4.0® extension set for Workspace A1/A2

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Set components:	ltem no.	ltem no.	Item no.	
1x set of roller shutter doors 3 and 4, 1x partition wall,	00201313	00201311	00162716	
4x PPC or PC bolts (depending on the system size				
of the work table)				

# **Equipment options for SPACE B**

# Two-axis manipulator

- Powerful and fast two-axis manipulator with excellent repeatability for ideal positioning of the workpieces
- The height of axis 2 can be adjusted in a range of 150 mm (axis of rotation)
- Mount for D28, D22 and D16 clamping plates
- Bracket always with D16 system bores
- Galvanically isolated clamping plate
- Extensive range of DEMMELER accessories
- Earthing via double sliding contacts up to 500 A



D28 D22 D16

PACE B

### COBOT WeldSpace 4.0® two-axis manipulator



Speed of manipulator axis 1/axis 2	0.01-7 rpm (in 0.02 rpm increments)
Axis 1 (swivel axis)	±190°
Axis 2 (axis of rotation)	±360°
Max. load capacity	500 kg
Weight	175 kg
Max. workpiece diameter	850 mm (with 360° rotation)
Max. workpiece length	1500 mm
Max. torque	1000 Nm
Item no. (two-axis manipulator for work table D28)	00161956
Item no. (two-axis manipulator for work table D22)	00161953
Item no. (two-axis manipulator for work table D16)	00200923



For the clamping plate for the two-axis manipulator, see page 260.

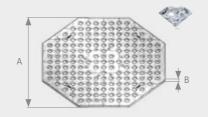


# Choose your clamping plate D16, D22 or D28 for the two-axis manipulator



# **Clamping plates**

- M8 tapped holes on the side
- Grid lines in X and Y alignment, 50 mm spacing throughout
- Hardened version DEMONT 760 M
- Tailored to the two-axis manipulator



D28

GIA	P	9			
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(1)		15	33	8	n
100				쳶	Π.
4	8	HS)		8	2

er plate D28				D28
A in mm	B in mm	Approx. weight in kg	Description	Item no.
WAF 800	25	95	50 x 50 mm grid	00162810

Clamping and adapter plate D22					D22
(SHEEK)	A in mm	B in mm	Approx. weight in kg	Description	Item no.
	WAF 800	17,5	67	50 x 50 mm grid	00162811
######################################					

Clamping and adapt	D16				
(1700 mg)	A in mm	B in mm	Approx. weight in kg	Description	Item no.
	WAF 800	12	43	50 x 50 mm diagonal grid	00151601

# Optional equipment for SPACE B

The SPACE B workspace offers room for larger components and fixtures, which can also be placed directly on the floor of the production facility. SPACE B can optionally be equipped with an additional 3D welding table (max. dimensions 2000 x 1000 mm). You can choose from the entire range of the DEMMELER 3D welding table and clamping system.





# Perfectly coordinated welding processes

## Welding systems

- $\bullet$  Welding systems designed for the COBOT WeldSpace 4.0  $^{\rm 8}$
- Robot welding equipment from the Fronius brand
- The welding device is integrated in the table base unit to save space
- Only one main switch and power connection for the cell with welding system
- Extensive job libraries
- EMC emission class: A

### Welding systems from the Fronius TPS400i series





### Technical device data:

- Mains voltage:  $3x 400 \text{ V/mains voltage tolerance: } \pm 15 \%$
- Mains fuse: 32 A slow-blow
- Mains frequency: 50/60 Hz
- Cos phi: 0,99
- MIG/MAG welding current range: 3-400 A
- Welding current at 10 min/40 °C: 40% 400 A/60% 360 A/100% 320 A
- MIG/MAG output voltage: 14.2-34.0 V
- Open-circuit voltage: 73 V
- Protection class: IP23
- Power source of the TPS 400i: Current range 400 A



Optionally available:

Fronius RC Panel Pro control panel (with 5 m cable) Item no. 00203955

	Fronius TPS400i 400 A Push water-cooled	Fronius TPS400i 400 A PushPull water-cooled	Fronius TPS400i 400 A CMT water-cooled
Integration and software extension of the DEMMELER WeldSpace 4.0®			
software Input of the welding jobs from the power source and simple selection	•	•	•
using a list on the control panel			
Welding packages: Standard welding package, Pulse welding package	•	•	•
CMT welding package	-	-	•
Interface for COBOT WeldSpace 4.0®	•	•	•
CU 1100i recirculating cooler	•	•	-
CU 1400i recirculating cooler	-	-	•
Intermediate tube assembly	•	•	•
W25i wire feed unit	•	•	•
SB SplitBox	-	•	•
Tube assembly	•	•	-
CMT tube assembly	-	-	•
Torch body MTB 400i R / 22° / L241 / H50	•	-	-
Torch body MTB 400i W R / 22° / L241 / H50			
with additional drive for wire feed unit in the torch	<u> </u>		
Robacta Drive/CMT push/pull torch / 22° / L241 / H50	-	-	•
Torch holder for COBOT UR10e	•	•	•
Item no.	00200728	00203951	00201304





# **Torch cleaning station**

### Torch cleaning

- Cutter, specially adapted to the welding torch (item no. 00203883)
- Clamping V-blocks with diameter of 25 mm (item no. 00203884, others available on request)
- Powerful, high-quality air motor for powerful cleaning

### Spraying unit

- Activated by the robot movement no output necessary
- Highly efficient spray function, minimal consumption
- Excess anti-splash agent is collected in a container
- Fully protected for a clean environment and safe work areas

### **DAV** wire cutter

- Powerful, reliable cutting device with sharp cutting action for starting an arc safely
- Hardened cutting blade for a long service life



### **COBOT WeldSpace 4.0® torch cleaning station**



Air consumption	Approx. 400 I/min
Rated pressure	6 bar
Operating pressure	6-8 bar
Max. wire diameter at 6 bar	1.6 mm solid wire
Control voltage	24 V DC
Power consumption	2.8 W
Operating voltage	10-30 V DC
Continuous current	Max. 100 mA
Power consumption	Approx. 14 mA (4 V)
Item no.	00201320



# MobiAirClean D1 welding fume extraction system

- The automatic cleaning system makes the mobile filter system ideal for welding work which involves non-alloy and alloyed steels, galvanised materials and aluminium and produces a high volume of fumes
- MobiAirClean D1 meets the safety requirements for devices from welding fume class "W3" (high-alloy steels that contain > 30% nickel)
- The specially developed cleaning system for any type of dirt gives the filter cartridge good
  cleaning characteristics, ensuring optimum extraction performance during the entire operation
- Including spiral tube and connecting tube
- Length (A)/width (B)/height (C): 665/1100/1495 mm



### COBOT WeldSpace 4.0® MobiAirClean D1 welding fume extraction system



Fan output	1860 m³/h
Stress	2900 Pa
Operating point	1100 m³/h at 1900 Pa
Pre-filter	Baffle plate
Filter area	10 m²
Filter cartridge	Dust class M
Motor power	1.1 kW
Input voltage	400 V/50 Hz
Power consumption	2.5 A
Noise level	Approx. 72 dB (A)
Current type	3Ph+N+PE
Weight	180 kg
Item no.	00204525

# **Network camera**

- Check and document welding results by means of live transmission and videos
- · Digital zoom
- With autofocus and wide dynamic range, ideal for difficult lighting conditions (welding light)

### COBOT WeldSpace 4.0® network camera



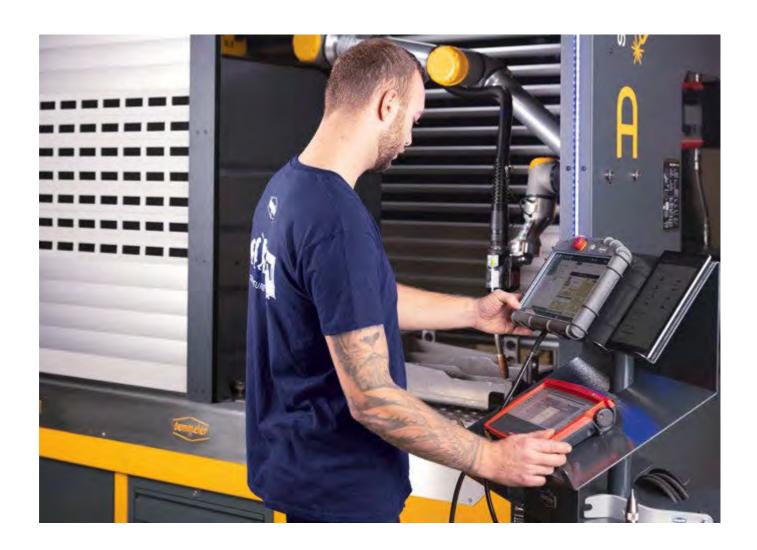
Item no. 00208481

Robust industrial tablet (Android) for monitoring and documenting the welding processes via the network camera

- Preinstalled Fronius Weld Connect app
- Save tooling sheets Item no. 00209144







# **COBOT WeldSpace 4.0® control panel terminal**

- Perfect storage option for the UR control panel, enabling button, Fronius panel and industrial tablet
- Holder for UR control panel and enabling button
- Extra heavy design prevents tipping over and, with the brakes on each castor, the terminal stays where you need it
- Four swivel castors with brakes



### COBOT WeldSpace 4.0® control panel terminal



A in mm	B in mm	C in mm	Approx. weight in kg	Item no.
1382	520	403	38	00153455



# WeldSpace 4.0® software options

WELDSPACE 4.0® SOFTWARE

These tools simplify the work steps and guide you to perfect welding results

### COBOT WeldSpace 4.0® "line seam" software option



- With this tool, you can create line seams or tack seams by entering the weld seam length and the gap, also circularly, without much programming effort
- With the COBOT, you only have to calibrate the start and end points of the weld seam; the tool takes
  care of the division of the line seams or tacking points

Item no. 00201676

# COBOT WeldSpace 4.0® "weave" software option



- With this tool, you can create perfect weave seams for linear as well as circular weld seams
- Simply calibrate the start and end points with the COBOT and enter the weave length and width, as
  well as the delay time, to define the weave seam
- This function can be used, for example, to create larger weld seams in one layer or to bridge gap seams

Item no. 00201677

### COBOT WeldSpace 4.0® "several identical workpieces" software option





- This function is used to move and rotate individual seams and to have these programs executed in a different location
- This function can be used to program workpieces once and execute them several times (weld several
  identical workpieces). Please note that the seam and programming shift depends on the kinematics
  and tube guidance of the robot.

Item no. 00201674









# **DEMMELER®** manipulators and turning units



Ergonomix M®
Welding and assembly in the optimum position

page 268

3D welding table

Okto 100

page 275



Robotix turning unit Turns and lifts medium loads from 2 t to 14 t

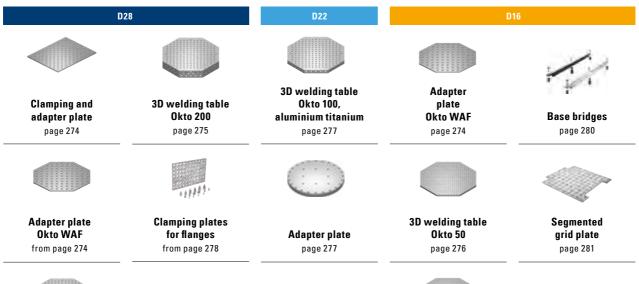
page 270



Robotix IP Our specialist for heavy loads up to 40 t

page 272

# Clamping and adapter plates for manipulators and turning units





3D welding table Okto 100 page 276



# Maximum flexibility during welding and assembly.

The size and bulkiness of workpieces often cause difficulties during welding, because not all points are easy to see. However, an optimal overview is a requirement for clean and error-free work. Due to their dimensions, workpieces have to be moved several times during the work process with a heavy device, usually a crane. Reduce this safety risk. The large 180° swivel range of the Ergonomix M® from DEMMELER has the crucial advantage of fully machining workpieces in a single clamping cycle without additional turning. There is no longer any need for repeated, time-consuming turning and rotating, for example using a crane. Staff always work in an ergonomically optimised working environment.



For more information about our DEMMELER Ergonomix M® manipulator range, please visit www.demmeler.com.







### Protection of health and safety

- Ergonomic work that protects your back
- Improved workplace safety

### Increased productivity and improved quality

- Maximum work area with minimised footprint
- Unparalleled swivel range up to 180°
- Consistent quality with optional calibration function to save reproducible sequences
- Higher melting deposition rate when welding, as most seams can be produced in the optimal position (flat position)
- Secure workpieces with the standard thread (M24) also in conjunction with the proven 3D clamping system

#### Extensive range of equipment is available

 Various clamping and adapter plates available in different sizes and shapes





# Ergonomix M® basic model

Description	M 2000/V1250	M 2000/V2500	M 2500/19000	M 4000
Bearing load (w/o worktop) [kg]	2000	2000	2500	4000
D=max. interference area at 180° (w/o worktop) [mm]	1000	1000	1000	1500
At height [mm]	650	650	650	520
Max. speed [rpm]	1,4	1,4	1,4	2
Min. speed [rpm]	0,75	0,2	0,2	0,2
Torque [Nm]	1250	2500	2500	5000
Tilt angle [°]	180	180	180	180
Tilting torque [Nm]	8000	8000	19000	32000
A=min. height (w/o worktop) [mm]	490	490	490	750
B=max. height at 180° swivel angle [mm]	970	970	970	983
C=max. height at 90° swivel angle [mm]	1480	1480	1480	1680
Pendant control station	$\overline{\hspace{1cm}}$	_ <u>√</u>	_ <u>√</u>	
10-speed control	$\overline{\hspace{1cm}}$	_ <u>√</u>	_ <u>√</u>	$\overline{\checkmark}$
Motors/rotary axis	1	2	2	2
Item no.	M02-02000-006	M02-02000-007	M02-02000-047	M04-04000-000

Specifications without worktop. Other equipment details available on request.

# Features of the Ergonomix M® and optimal extension options

- 1 Control system
  - with pendant control station (2)
  - with foot switch 3
- 4 Programming controller

M2000: Item no. Z00-01001-024

M4000: Item no. Z00-01001-025

- Standard equipment Special equipment
- **5** Rotary feedthroughs
  - for status queries, electrical: Item no. Z00-01004-005
  - for pneumatic clamping fixtures: Item no. Z00-01004-008
  - for hydraulic clamping fixtures: Item no. Z00-01004-009

- 6 Earth connection
  - Max. 400 A at 60% ED: Item no. Z00-01000-002
  - Max. 700 A at 60% ED: Item no. Z00-01000-009
- 7 Laser scanner Item no. 200-01010-001



# **NEW** Robotix turning unit: Easily position heavy loads up to 14,000 kg

The Robotix turning unit from DEMMELER can be used to move long and heavy workpieces into the ideal position for welding and assembly work so that they can be lifted and lowered or turned in both directions using two electric lifting columns. Both of the turning unit's columns are mounted on the floor of the production facility. There is the option to mount the turning unit on the DEMMELER rail system. This allows the distance between the two face plates to be set to different workpiece sizes.





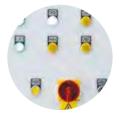


Specifications without worktop. Other equipment details available on request.

# **Basic model of the Robotix turning unit**

WE 2000	WE 4000	WE 6000	WE 8000	
1000	2000	3000	4000	
2000	4000	6000	8000	
540	600	600	600	
1700	1700	1700	1700	
2240	2300	2300	2250	
2000	3000	6000	10000	
$\overline{\hspace{1cm}}$	$\overline{\hspace{1cm}}$	$\overline{}$	$\overline{}$	
102-02000-050	104-04000-050	106-06000-050	108-08000-050	
	1000 2000 540 1700 2240 2000	1000 2000 2000 4000 540 600 1700 1700 2240 2300 2000 3000 ✓	1000 2000 3000 2000 4000 6000 540 600 600 1700 1700 1700 2240 2300 2300 2000 3000 6000 ✓ ✓	

Description	WE 10000	WE 12000	WE 14000	
Load capacity per column [kg]	5000	6000	7000	
Total load capacity [kg]	10000	12000	14000	
Standard height of rotation axis [mm]	600	600	600	
Effective stroke [mm]	1700	1700	1700	
Turning radius [mm]	2250	2250	2250	
Torque [Nm]	10000	12000	12500	
Controller at control cabinet		<u>√</u>	<u>√</u>	
Item no.	110-10000-050	112-12000-050	114-14000-050	



### Controller at control cabinet

- Axis activation at the touch of a button
- Optional potentiometer, for setting the speed





## 2 Safety laser scanner

- Ensure both maximum safety and productivity
- Individually adaptable protection zone
- Display unit with monitor view/camera view and a clearly visible status LED for ultimate ease of use



### 3 Adapter plates

Adapter plates with D28 system bores in a 100 x 100 mm grid and M24 thread are available as an option

# Optional equipment versions (available on request)

Adapter plates from dia. 600 to dia. 1500 mm

Slave lifting block is mobile and not stationary

Drive lifting block is mobile and not stationary

Welding current supply 350 A

LCD display on the control box

Variable frequency control of the rotary drive for continuously variable speed selection up to 12,500 Nm

Variable frequency control of the rotary drive for continuously variable speed selection above 20,000 Nm

Adjustable torque limit using friction clutch in the rotary drive

Area scanner for preventing the system from colliding with an obstacle or turning onto an obstacle

Effective stroke increased every 100 mm

Special flange plate or drilling pattern change





# When you have something big in mind. Lift and turn workpieces up to 40,000 kg.

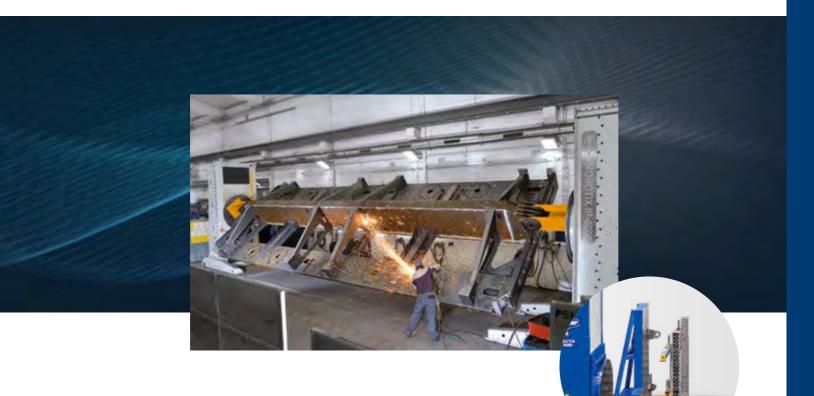


# Robotix basic device

Description	IP 20000	IP 40000
Bearing load (w/o worktop) [kg]	20000	40000
Lifting axis:		
Drive	servohydraulic	servohydraulic
Lifting speed [m/min]	1,5	1
Max. lifting height [mm]	2200	2450
Minimum height [mm]	1050	1050
Maximum height [mm]	3250	3500
Rotary axis 1/tilt axis:		
Min./max. speed [rpm]	0,2 – 1,0	0,2 – 1,0
Angle of rotation [°]	± 360 continuous turning	± 360 continuous turning
Torque [Nm]	24000	50000
Controller at control cabinet	$\overline{\hspace{1cm}}$	<u>√</u>
Item no.	120-01000-100	140-01000-100

Specifications without worktop. Other equipment details available on request.





When you have big ambitions, you need machinery to match. With the Robotix IP manipulator, you can position your workpieces flexibly, manufacture efficiently and work ergonomically. In a relaxed posture, a welding seam can be welded far more precisely. Optimum positioning of the workpiece also achieves an ideal production process: No flowing of the welding material. We can offer you the right product among numerous solutions.

We develop, design and construct customised clamping fixtures for you on request

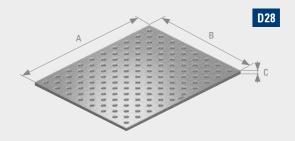
# **Optional equipment**

Control options	IP 20000	IP 40000
Programming controller	Z10-W1000-102	Z20-W1000-102
Laser scanner	Z10-W1000-101	Z20-W1000-101
Connection as additional robot axis	Z10-W1000-103	Z20-W1000-103
Counter-support for rotary axis 1	Z10-W1000-108	Z20-W1000-108
Positioning options	IP 20000	IP 40000
Preparation for assembly on DEMMELER rail system for each lifting column	Z10-W1000-109	Z20-W1000-109
DEMMELER rail system (per metre)	D28-W2003-000	D28-W2003-000
Additional options	IP 20000	IP 40000
Rotary feedthrough for status queries, electrical	Z10-W1000-104	Z20-W1000-104
Rotary feedthrough for pneumatic clamping fixtures	Z10-W1000-105	Z20-W1000-105
Rotary feedthrough for hydraulic clamping fixtures	Z10-W1000-106	Z20-W1000-106
Earth connection for welding device	Z10-W1000-107	Z20-W1000-107



# Clamping and adapter plate

- The miniature welding table with grid lines
- Used in combination with 3D welding tables and rotary welding tables
- M8 thread on all sides, e.g. for stops
- Other dimensions available on request



 Adapter plate D28

 A in mm
 B in mm
 C in mm
 Approx. weight in kg
 Description
 Item no.

 1000
 800
 25
 150
 100 x 100 mm diagonal grid
 D28-02001-000

# **Adapter plate Okto WAF**

- The miniature welding table with grid lines
- $\bullet\,$  Used in combination with 3D welding tables and rotary welding tables
- M8 thread on all sides, e.g. for stops
- Other dimensions available on request



D28

# Adapter plate D28 Okto WAF



KTO WAF				DZ0
A in mm	B in mm	Approx. weight in kg	Description	Item no.
WAF 600	25	55	100 x 100 mm diagonal grid	D28-02001-201
WAF 800	25	95	100 x 100 mm diagonal grid	D28-02001-202
WAF 1000	25	145	100 x 100 mm diagonal grid	D28-02001-203

### Adapter plate D16 Okto WAF



IU WAI				D10
A in mm	B in mm	Approx. weight in kg	Description	Item no.
WAF 400	12	11	50 x 50 mm diagonal grid	D16-02100-106
WAF 600	12	25	50 x 50 mm diagonal grid	D16-02100-107
WAF 800	12	45	50 x 50 mm diagonal grid	D16-02100-108

D28

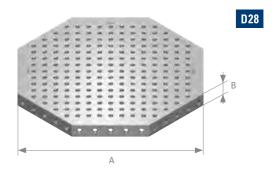


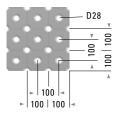
# 3D welding table D28 Okto WAF

- Preferred use on manipulators in robot cells
- Numerous clamping options on all nine clamping surfaces
- With 100 x 100 diagonal grid

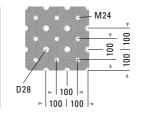
### Other additional options available on request:

- High-strength aluminium titanium alloy, for approx. 60% weight reduction and approx. 10% higher bending strength
- With special connection drilling pattern, adapted to the face plate of your manipulator (please include manipulator type and drawing of the face plate with enquiry – can be offered for a surcharge)
- Prepared for table legs





100 x 100 mm diagonal grid



**Optional:**Welding table with
100 x 100 mm diagonal grid
and M24 thread

### 3D welding table D28 Okto 100 WAF



A in mm	B in mm	Approx. weight in kg	Description	Item no.
WAF 600	100	88	100 x 100 mm diagonal grid	PL28-11008-001
WAF 800	100	165	100 x 100 mm diagonal grid	PL28-01013-001
WAF 1000	100	210	100 x 100 mm diagonal grid	PL28-01038-001
WAF 1200	100	310	100 x 100 mm diagonal grid	PL28-01020-001
WAF 1400	100	450	100 x 100 mm diagonal grid	PL28-01087-001
WAF 1500	100	490	100 x 100 mm diagonal grid	PL28-01059-001
WAF 1600	100	540	100 x 100 mm diagonal grid	PL28-11036-001
WAF 1800	100	670	100 x 100 mm diagonal grid	PL28-01049-001
WAF 2000	100	795	100 x 100 mm diagonal grid	PL28-01058-001
WAF 3000	100	1650	100 x 100 mm diagonal grid	PL28-12010-001

# 3D welding table D28 Okto 200 WAF



UKTO ZUU W	AF		D28	
A in mm	B in mm	Approx. weight in kg	Description	ltem no.
WAF 600	200	141,5	100 x 100 mm diagonal grid	PL28-11008-000
WAF 800	200	194	100 x 100 mm diagonal grid	PL28-01013-000
WAF 1000	200	340	100 x 100 mm diagonal grid	PL28-01038-000
WAF 1200	200	415	100 x 100 mm diagonal grid	PL28-01020-000
WAF 1400	200	515	100 x 100 mm diagonal grid	PL28-01087-000
WAF 1500	200	565	100 x 100 mm diagonal grid	PL28-01059-000
WAF 1600	200	675	100 x 100 mm diagonal grid	PL28-11036-000
WAF 1800	200	810	100 x 100 mm diagonal grid	PL28-01049-000
WAF 2000	200	980	100 x 100 mm diagonal grid	PL28-01058-000
WAF 3000	200	2000	100 x 100 mm diagonal grid	PL28-12010-000



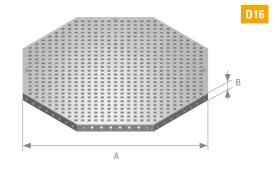


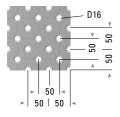
# 3D welding table D16 Okto WAF

- Preferred use on manipulators in robot cells
- Numerous clamping options on all nine clamping surfaces
- With 50 x 50 mm diagonal grid

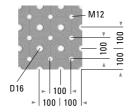
### Other additional options available on request:

- High-strength aluminium titanium alloy, for approx. 60% weight reduction and approx. 10% higher bending strength
- With special connection drilling pattern, adapted to the face plate of your manipulator (please include manipulator type and drawing of the face plate with enquiry – can be offered for a surcharge)
- Prepared for table legs





50 x 50 mm diagonal grid



# Optional:

Welding table with  $50 \times 50 \text{ mm}$  diagonal grid and M12 thread

## 3D welding table D16 Okto 50 WAF



OKIO DU WA	AГ	טוט		
A in mm	B in mm	Item no.		
WAF 600	50	50	50 x 50 mm diagonal grid	PL16-01009-001
WAF 800	50	80	50 x 50 mm diagonal grid	PL16-01008-001
WAF 1000	50	110	50 x 50 mm diagonal grid	PL16-01024-001
WAF 1200	50	150	50 x 50 mm diagonal grid	PL16-01070-001

### 3D welding table D16 Okto 100 WAF

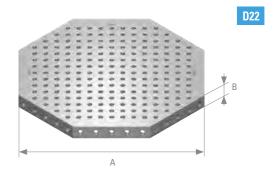


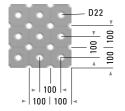
0 0 K to 100 TT	- · · ·			
A in mm	B in mm	Approx. weight in kg	Description	Item no.
WAF 600	100	51	50 x 50 mm diagonal grid	PL16-01009-000
WAF 800	100	94	50 x 50 mm diagonal grid	PL16-01008-000
WAF 1000	100	140	50 x 50 mm diagonal grid	PL16-01024-000
WAF 1200	100	185	50 x 50 mm diagonal grid	PL16-01070-000



# 3D welding table D22 Okto 100 WAF

- Preferred use on manipulators in robot cells
- Numerous clamping options on all nine clamping surfaces
- In the D22 bore grid 100 x 100
- Diagonal bore produced in M16
- High-strength aluminium titanium alloy, for approx. 60% weight reduction and approx. 10% higher bending strength
- Together with the adapter plate, with special connection drilling pattern, adapted to the face plate of your manipulator (please include manipulator type and drawing of the face plate with your enquiry)





100 x 100 mm diagonal grid

### 3D welding table D22 Okto 100 WAF



Z UKTO IUU W	2 OKTO 100 WAF					
A in mm	B in mm	Approx. weight in kg	Description	Item no.		
WAF 600	100	36,5	100 x 100 mm diagonal grid	PL22-11008-001		
WAF 800	100	44,0	100 x 100 mm diagonal grid	PL22-01013-001		
WAF 1000	100	62,5	100 x 100 mm diagonal grid	PL22-01038-001		

# **Adapter plate**

- Interface element for adaptation of the 3D welding table Okto 100 D22 to welding robot or manipulator
- Recommended for automation solutions and robotics applications
- Interface drilling pattern produced according to customer requirements
- Including mounting screws



# Adapter plate D22



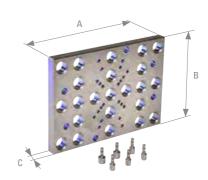
A in mm	Approx. weight in kg	Description	Item no.
WAF 600	30,5	Adapter plate for table WAF 600	00116157
WAF 800	65,0	Adapter plate for table WAF 800	00116159
WAF 1000	108,0	Adapter plate for table WAF 1000	00116160



D22

# **Clamping plates for flanges DIN 2632/2633/2634/2635**

- Pipe flanges can be quickly and precisely set out on the hole circle using attachment bolts and secured with the D28-08001-000 quick-release toggle clamp. In addition, D28 system bores are used to mount the system's clamping elements.
- · Attachment bolts are included in the scope of delivery
- · Marking of the hole circles
- · Clamping plates for other flanges available on request



### Clamping plates for flanges DIN 2632/2633

D28



- DIN 2633 nominal diameters DN 15 DN 200
- DIN 2632 nominal diameters DN 200
- Including attachment bolts: 2x dia. 13.8 mm, 2x dia. 17.8 mm, 2x dia. 21.8 mm

A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
350	250	25	12	Including attachment bolts	D28-02005-000

# Clamping plates for flanges DIN 2632/2633/2634/2635

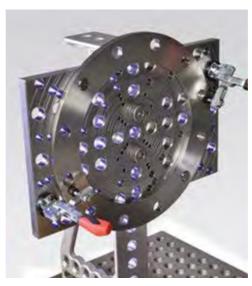
D28



- DIN 2632 nominal diameters DN 200 – DN 400
- DIN 2633 nominal diameters DN 15 – DN 400
- DIN 2634 nominal diameters DN 200 DN 400
- DIN 2635 nominal diameters DN 50 DN 400
- Including attachment bolts: 2x dia. 13.8 mm, 2x dia. 17.8 mm, 2x dia. 21.8 mm, 2x dia. 25.8 mm, 2x dia. 29.8 mm, 2x dia. 32.8 mm, 2x dia. 35.8 mm, 2x dia. 38.8 mm

A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
550	350	25	30	Including attachment bolts	D28-02006-000







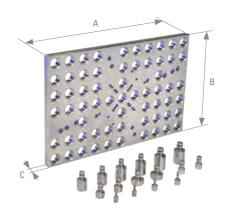
D28

D28



# Clamping plates for ANSI flanges/JIS flanges

- Pipe flanges can be quickly and precisely set out on the hole circle using attachment bolts and secured with the D28-08001-000 quick-release toggle clamp. In addition, D28 system bores are used to mount the system's clamping elements.
- Attachment bolts are included in the scope of delivery
- · Marking of the hole circles
- Clamping plates for other flanges available on request



D28

### Clamping plates for ANSI flanges (ANSI standard B 16.5)



• • • • • • • • • • • • • • • • • • • •					
A in mm	B in mm	C in mm	Approx. weight in kg	Description	ltem no.
350	250	25	12	150 lbs - 1/2" - 08"	D28-02005-011
350	250	25	12	300 lbs - 1/2" - 08"	D28-02005-012
350	250	25	12	600 lbs - 1/2" - 06"	D28-02005-013
550	350	25	30	150 lbs - 1/2" - 14"	D28-02006-026
550	350	25	30	300 lbs - 1/2" - 14"	D28-02006-024
550	350	25	30	600 lbs - 1/2" - 14"	D28-02006-025

## Clamping plates for JIS flanges



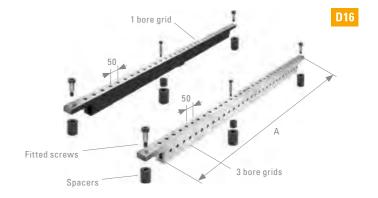
A in mm	B in mm	C in mm	Approx. weight in kg	Description	Item no.
350	250	25	12	JIS 5K – DN 10 – DN 225	D28-02005-018
550	350	25	30	JIS 5K – DN 10 – DN 450	D28-02006-034
350	250	25	17	JIS 10K – DN 10 – DN 225	D28-02005-019
550	350	25	30	JIS 10K – DN 10 – DN 450	D28-02006-005
350	250	25	12	JIS 16K/20K – DN 10 – DN 200	D28-02005-020
550	350	25	35	JIS 16K/20K - DN 10 - DN 400	D28-02006-035
350	250	25	12	JIS 30K – DN 10 – DN 200	D28-02005-021
550	350	25	30	JIS 30K – DN 10 – DN 350	D28-02006-036
350	250	25	12	JIS 40K – DN 10 – DN 150	D28-02005-022
550	350	25	30	JIS 40K – DN 10 – DN 350	D28-02006-037
350	250	25	12	JIS 63K – DN 10 – DN 150	D28-02005-023
550	350	25	30	JIS 63K – DN 10 – DN 350	D28-02006-038





# **Base bridges**

- Designed especially for use on laser machines (e.g. TRUMPF Lasercell 105, 1005, 6005, 7040)
- In conjunction with a D16-02100-000 segmented grid plate for many clamping options
- Direct mounting of clamping components possible
- Including assembly accessories such as fitted screws and spacers for mounting on the laser machine
- Grid lines every 50 mm, system bores every 50 mm



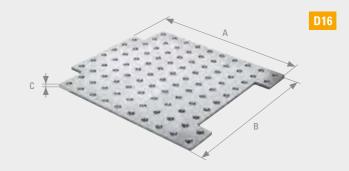
idges				D16
1	A in mm	Approx. weight in kg	Description	ltem no.
1	1000	7	1 bore grid, for TRUMPF Lasercell 1000	D16-04100-002
	1366	16	1 bore grid, for TRUMPF Lasercell 105	D16-04100-010
	1500	17	1 bore grid, for TRUMPF Lasercell 7000	D16-04100-049
	1682	20	1 bore grid, for TRUMPF Lasercell 1005	D16-04100-009
	2182	24	1 bore grid, for TRUMPF Lasercell 6005	D16-04100-013
	1500	17	1 bore grid, for TRUMPF Lasercell 7040	D16-04100-027
	2000	22	1 bore grid, for TRUMPF Lasercell 7020	D16-04100-036
	2000	22	1 bore grid, for TRUMPF Lasercell 7000	D16-04100-050
1	1366	30	3 bore grids, for TRUMPF Lasercell 105	D16-04100-008
	1682	36	3 bore grids, for TRUMPF Lasercell 1005	D16-04100-005
	2182	48	3 bore grids, for TRUMPF Lasercell 6005	D16-04100-012
	1500	30	3 bore grids, for TRUMPF Lasercell 7040	D16-04100-026

Other dimensions available on request. Figure similar.

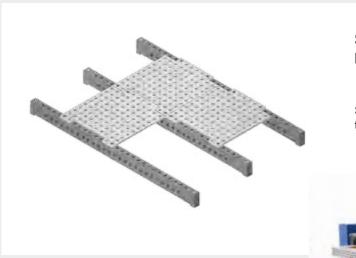


# Segmented grid plate

- Highly flexible clamping options thanks to 50 mm grid
- Nesting the contours inside each other enables a continuous clamping area
- Specially for use in conjunction with base bridges on 3D laser machines
- · Grid lines every 50 mm



# Segmented grid plate D16 D16 A in mm B in mm C in mm Approx. weight in kg Description Item no. 548 498 12 22 50 x 50 mm grid D16-02100-000



# Segmented grid plates mounted on base bridges enable a continuous floor plate

Short PC countersunk bolts are used for mounting, see page 123









# DO YOU WANT TO KNOW HOW OUR PRODUCTS ARE USED IN PRACTICE?

Companies all over the world rely on DEMMELER to boost their productivity and improve safety and ergonomics at the workplace. The trust that they place in us and the positive feedback that we receive from them are the best testimony of how satisfied they are with our company. Here you can find a current selection of successful projects with companies from various different industries and a description of the impact DEMMELER has had on their everyday work.

# Welding at the highest level with ultimate flexibility





Schulz Fördersysteme GmbH specialises in metalworking. In addition to sheet metal parts, edge parts and welded assemblies, the company also produces conveyor systems. Around 100 members of staff work for the brands Schulz Fördersysteme and Blechbearbeitung Thüringen at the Geratal site in Thüringen. As a certified specialist business in accordance with DIN EN 15085-2 CL1, Schulz Fördersysteme has a special responsibility for producing highly safety-relevant components for rail vehicles. The fact that the company sees itself as a system supplier with a high vertical range of manufacture is also evident from its state-of-the-art production processes.

A few months ago, the company also started to use a COBOT WeldSpace 4.0 from DEMMELER along-side a DEMMELER manipulator and rail system. With the new COBOT system, Schulz Fördersysteme can quickly and easily adapt to varying component geometries or sizes in production. In addition to being easy to program, the COBOT WeldSpace 4.0 is designed to reduce the physical exertion of welders. Welders are often forced to work in uncomfortable positions as the weld seams are frequently hard to reach. This is why the SPACE B workspace of the COBOT system was equipped with a two-axis manipulator: Workpieces up to 500 kg can be easily clamped in the ideal flat position. There is no longer a need for time-consuming reclamping of workpieces and, thanks to the manipulator's rotary axis, even circumferential seams can be welded without any problems.

"We are a contract manufacturer specialising in sheet metal machining for a range of different industries: Automotive, rail, machinery and plant construction, conveyor technology, furniture and metal construction. Our flexibility has always been one of our greatest strengths compared to our competitors," states Carsten Stein, Managing Director at Schulz Fördersysteme. DEMMELER assists us with its large variety of products, which can be used to produce small and medium batch sizes. We appreciate the excellent quality of DEMMELER products – and the outstanding service!"





SCHULZ FÖRDERSYSTEME GMBH AN DER GLASHÜTTE 10 99330 GERATAL – GRÄFENRODA · GERMANY





Multiple parts, including different ones, can be welded simultaneously using the COBOT WeldSpace 4.0. The automatic enclosure movement makes it possible to work in multi-station mode. While the robot is welding on one side, the operator – protected by retractable roller doors with aluminium cladding and integrated welding protection glass – can set up and reclamp on the other side in parallel (two-station operation).









# kugelmann Maschinenbau -

a family-run company from the Allgäu region with a focus on and tradition of municipal technology

"That's not our only reason for claiming to be 'different from the rest'." As a medium-sized family business with its roots in mechanical engineering, kugelmann has been present on the market since 1952 and continuously develops new technologies and optimises production with an extensive business area ranging from municipal to laser technology. Whether it's vacuum sweeper combinations, lawn care machines, snowploughs or spreaders – the company's strengths lie in the quality and expertise in solutions from a single source.

#### PIONEERING SOLUTIONS WITH A PASSION FOR DETAILS

The municipal machinery, including electronic control systems, hydraulics, mechanics and cladding, is entirely developed and manufactured at the production site in Germany. Thanks to the high vertical range of manufacture and the modern product facilities, both small and large series can be produced quickly and cost-effectively. The high quality of the products is the result of state-of-the-art processing of steel and sheet metal directly on site, as well as the company's philosophy of processing raw materials of the very highest quality and only manufacturing to order.

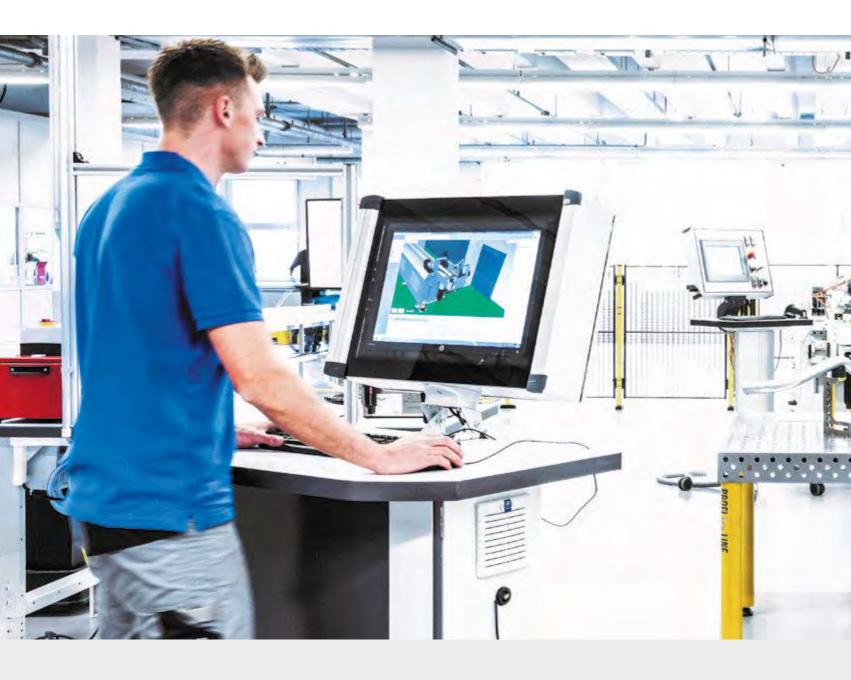




Constructions from kugelmann always have one thing in common: The ability to perfectly resolve customers' unique issues, while always remaining committed to keeping the promise to use the company's expertise in innovative mechanical engineering and to fulfil its high standards for perfect workmanship.

KUGELMANN MASCHINENBAU E.K. GEWERBEPARK 1–5 · 87675 RETTENBACH AM AUERBERG · GERMANY





VOSS Fluid is a premium manufacturer and quality supplier of connecting systems for mobile and stationary hydraulics. The high quality standards that VOSS Fluid GmbH requires from its products are also reflected in its range of services. As a system partner for hydraulic systems, the extensive range of services is specifically designed to show users where there is the potential to make savings and initiate optimisation processes. For instance, the company offers full project support, from engineering through to special logistics services. Assembly audits are also part of our service portfolio, alongside hydraulic system consultation. The company is always aligned with the industry- and company-specific needs and specifications of its customers.

### FLUID SYSTEMS IN LINE WITH THE HIGHEST QUALITY STANDARDS

"Making what's good even better" – true to this motto, experienced engineers and technicians work on innovative hydraulic components for a variety of applications at the headquarters in Wipperfürth. When developing products, the focus is on maximum process reliability. This is how the company creates products that impress across the board.

**VOSS FLUID GMBH · LÜDENSCHEIDER STR. 52–54 · 51688 WIPPERFÜRTH · GERMANY** 







As a premium manufacturer, VOSS Fluid applies its high standards for individual components to the production of individually manufactured, ready-to-install hydraulic lines too.

The latest production technologies and a high degree of automation ensure a consistently high level of quality at VOSS Fluid.



# Production expertise as a success factor – tailor-made structures created from steel, stainless steel and aluminium, whether manufactured as individual parts or in series production

As an expert point of contact, Metallforum Metallbau GmbH produces structures made from steel, stainless steel and aluminium. With modern machinery and a high-achieving team of 20 members of staff and four trainees, the company offers an extensive range of products, including those from the sectors of vehicle construction, medium-voltage switchgear, tubular frames for mechanical engineering, components for road-rail vehicles, special constructions, billboards, control cabinets and much more in highly precise quality. The company also offers production processes such as laser cutting, CNC tube bending, welding and laser robot welding as a contract service provider.

By using the 3D clamping systems from DEMMELER and state-of-the-art machinery, Metallforum Metallbau GmbH in Ahrbergen is continuously expanding its expertise in production. This forms the foundation for the company's success, enabling it to effectively set itself apart from the competition as an efficient provider of solutions. "Quality is at the forefront of all our products," explains Jens Löchel, Managing Director at Metallforum Metallbau GmbH. "However, we are also characterised by our flexibility and fast response times, our first-class service and our punctuality." The company made a conscious decision to use the extensive DEMMELER clamping system for this.

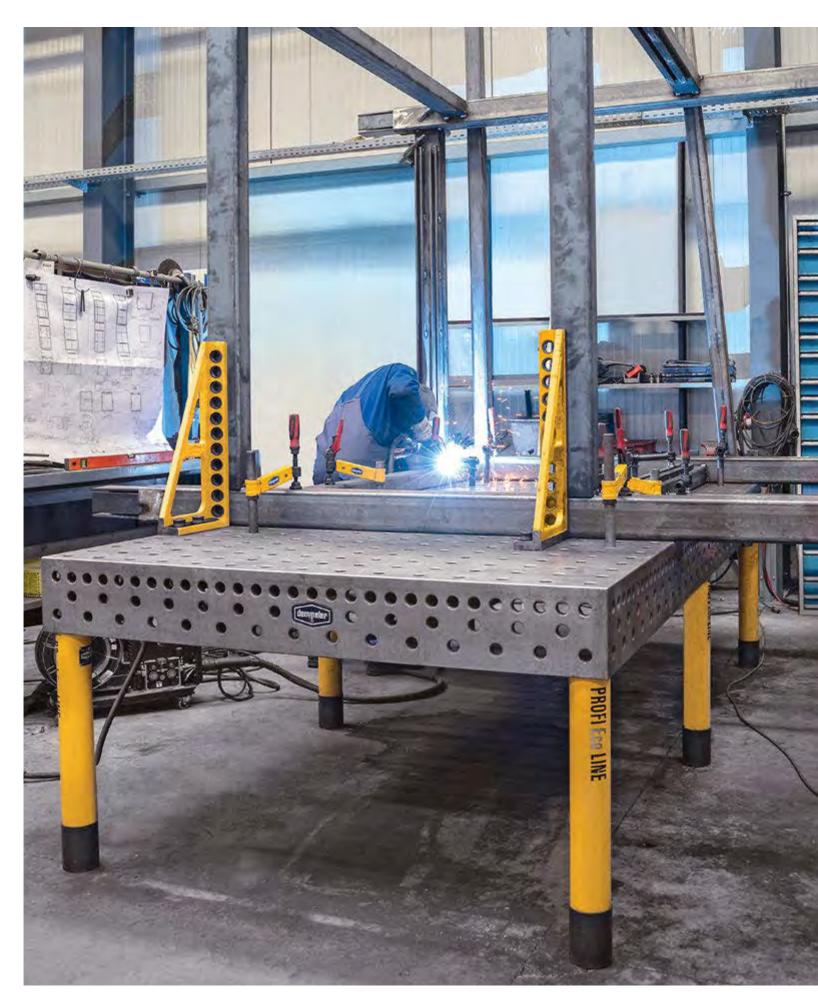








Stainless steel constructions are one of more than one thousand products to be produced by the company that was founded in 1996.







### Precision and efficiency in individual and series production

Braunholz Metallbau GmbH from Hanover focuses on the production of high-quality, customised individual products made from steel, weathering steel, stainless steel and aluminium, and the industrial series production of complete assemblies. The customers of the medium-sized company come from a wide variety of industries.

The extensive range of services available from Braunholz Metallbau not only requires experienced and expert employees, but also equipment that can be used flexibly. The company has been producing products on and using 3D clamping systems from DEMMELER for years now. The sophisticated and flexible system of welding tables and system accessories has proven itself across the board many times over. High-quality and economical production is based on the highest dimensional accuracy, including for repetitive process steps, and fast fitting of workpieces. The company is ideally positioned to meet the demands of today and the needs of tomorrow.



Zertifiziert nach: DIN EN 1090

meisterbetrieb schweißfachbetrieb BRAUNHOLZ METALLBAU GMBH DESBROCKHEIDERING 36 · 30419 HANOVER GERMANY





## Clearing the way for greater flexibility and preventive occupational safety

DB Fahrzeuginstandhaltung GmbH offers optimised solutions for repairing and maintaining rail vehicle fleets. Alongside the modern technical infrastructure in its network of plants and its highly qualified workforce, the company possesses many decades of expertise that make its range of services unique in Europe. Whether technical inspections, modernisation, component reconditioning or post-accident repairs: The company's expertise covers all maintenance and repair work on rail vehicles and components – from high-speed trains to light rail systems.

DB FAHRZEUGINSTANDHALTUNG GMBH
WEILBURGER STR. 22 · 60326 FRANKFURT · GERMANY



#### **Excellent posture and maximum productivity**



Thanks to the large working space, paired with a small footprint, the DEMMELER Ergonomix®M manipulator is the ideal addition to the state-of-the-art production facilities. Thanks to the patented swivel range of up to 180°, the workpieces can be fully assembled in one clamping cycle without additionally having to be turned over.



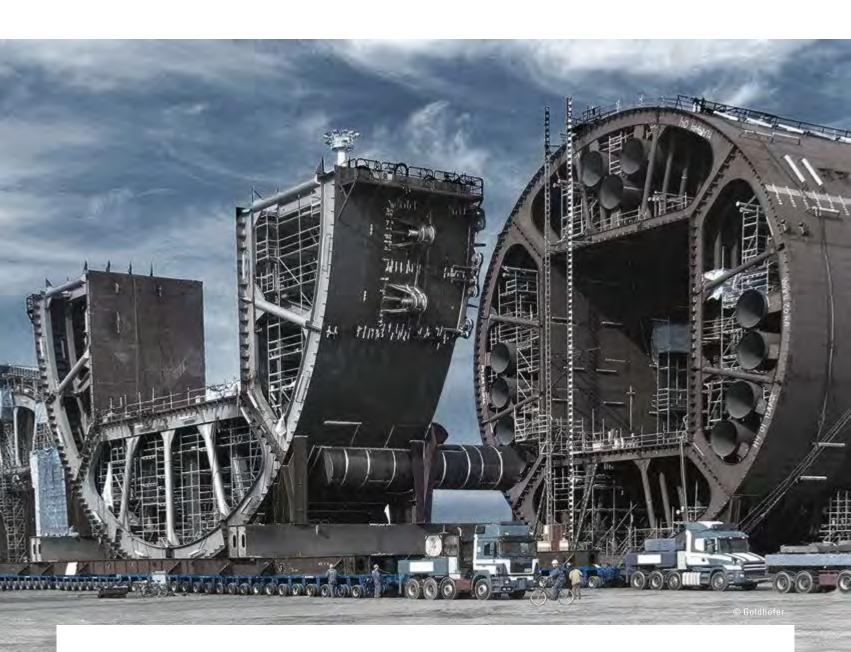
The manipulator, which boasts both angular and height adjustment capabilities, consistently moves even the highest loads into the ideal position, thus permitting an ergonomic working posture even during heavy-duty handling operations. The assembly operations can be carried out without tiring and with consistently high precision.







Assembling gear sets for urban trains demands flexibility. To ensure quick changeovers of equipment, heavy wheelsets and gears weighing up to two tonnes must be positioned precisely and safely.



## GOLDHOFER – an eventful history

The global player from the Allgäu region looks back on a long company history defined by passion, experience and innovation in the field of road haulage, heavy-duty and special transport solutions. Goldhofer enjoys international renown thanks to the perfect integration of road, rail, marine and air transport. Efficiently and reliably overcoming extreme challenges shapes the company's day-to-day business.

#### GREAT, GREATER, GOLDHOFER -

the Swabian company continuously pushes the limits of what is possible according to this motto. With modern design and production technologies, Goldhofer creates trendsetting and economical transport solutions ranging from trailers to semi-trailers, from aircraft tugs to modular heavy lorries.

GOLDHOFER AKTIENGESELLSCHAFT DONAUSTRASSE 95 · 87700 MEMMINGEN · GERMANY







#### Heavyweights for heavy-duty applications

The vehicle components in Goldhofer products are true heavyweights. Manufacturing them requires clamping systems with extreme load capacities that are mobile and can be flexibly combined and positioned automatically. A task that literally cannot be taken lightly. A real challenge – even for us at DEMMELER as a manufacturing equipment supplier.



Goldhofer is one of DEMMELER's customers who uses the entire product range, from basic welding tables to sliding legs and rail systems, through to manipulators — also in custom versions.



Production at Goldhofer can be almost be considered an overview of the numerous possible applications of DEMMELER solutions.

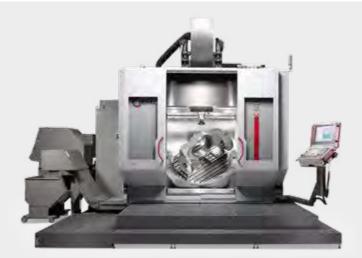
## HERMLE — a name that is synonymous with high-precision machining centres around the world

With around 1000 highly motivated employees, Hermle is one of the leading manufacturers of high-precision machining centres and automation solutions, which occupy a leading national and international position. "Better milling" is Hermle's slogan for optimised results. This is because the proverbial Hermle precision has made the company an important machine manufacturer in many industries.

From large, complex components to miniature high-tech elements. From medical technology to motor racing, the Swabian company proves its expertise day after day. Based on customer requirements and the specific components being produced, Hermle also develops comprehensive solutions with perfectly harmonised tools, control systems and automation technologies.

MASCHINENFABRIK BERTHOLD HERMLE AG INDUSTRIESTRASSE 8–12 78559 GOSHEIM · GERMANY





C60 U











Productivity, precision and innovation are key characteristics of all Hermle products. Naturally this also applies to in-house production. The patented Ergonomix M® manipulator — with its swivel range of 180°— is capable of reproducibly positioning components weighing up to 1.5 t in assembly. Repeated, time-consuming rotating and turning of the workpieces, for example with a crane, are no longer necessary, greatly reducing non-productive time. The proven DEMMELER welding table systems with ergonomic scissor lift are used in welding too.

Mr Hipp (Head of Marketing at Hermle) also emphasises that the manipulators relieve the workers of heavy-duty handling tasks and enable them to work with an ergonomic posture. Assembly work can be carried out without tiring and with consistently high precision. Staff absences due to overexertion and illness are prevented as well. These are many good reasons in favour of the DEMMELER manipulators.



## Production of high-precision structural components with the DEMMELER 3D clamping system



As part of this complete package, the clamping system from DEMMELER is used. In many projects, composite parts are bonded with metal components with high precision. To do this, they are aligned and measured in relation to each other, which requires the flexibility and adaptability of the DEMMELER clamping system.



Thanks to the CAD database of all modules provided, these structures can be planned in detail, thus saving time and money. Even complex customer designs are precisely connected to the DEMMELER system using individually designed adapters.



Shaping the future sustainably: This requires ecologically pioneering and economically reasonable production of high-tech products made of fibre composites such as carbon fibre reinforced plastic (CFRP) or glass fibre reinforced plastic (GRP). Guaranteed to be suitable for the highest demands and use under extreme conditions. INVENT from Braunschweig can draw on many years of experience in the field of fibre composite technology. As an expert development partner, the company offers a comprehensive range of services.

#### TECHNOLOGICAL EXPERTISE IN ALL ASPECTS OF LIGHTWEIGHT CONSTRUCTION

As a recognised lightweight construction specialist for innovative fibre composite technologies in the aerospace, mechanical engineering, automotive, rail vehicle and shipbuilding industries, INVENT develops and produces high-precision structural components, from the initial idea through to series production. The company's own designers and constructors work very closely with a wide range of manufacturing specialists. This makes it possible to offer customers a complete package from a single source with regard to design, production planning, manufacturing processes, machining, joining and assembly, as well as painting and quality control.

INVENT GMBH · CHRISTIAN-POMMER-STR. 47 · 38112 BRAUNSCHWEIG · GERMANY

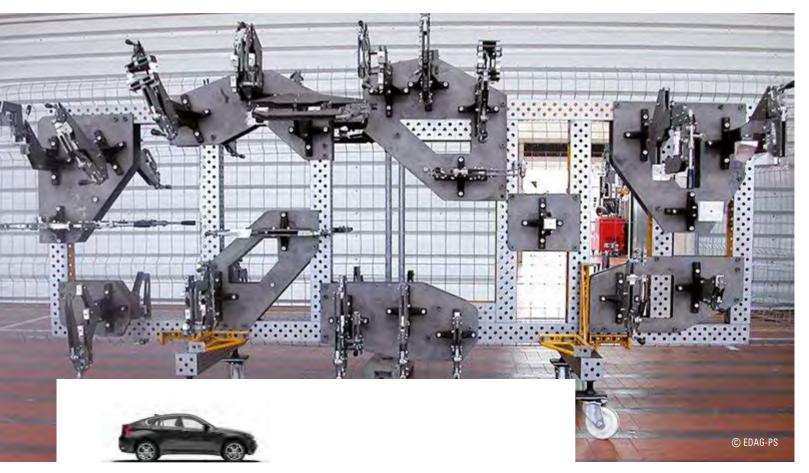




Using 3D measuring technology, it is also possible to align variable structures specifically with one another, which means that several configurations can be produced. DEMMELER COMPONENTS are used for this purpose.



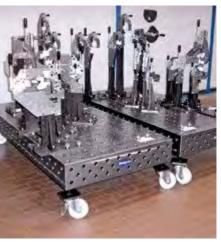
On the other hand, due to the high dimensional accuracy of the drilling pattern, specially manufactured positioning systems can also be used flexibly.



#### Innovative tools for innovative solutions

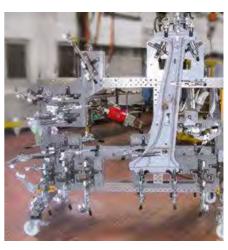
EDAG Engineering AG is a globally active development partner for manufacturers of automobiles and rail vehicles. The experts at EDAG take an integrated approach and, beyond designing vehicle prototypes, plan the corresponding production facilities with the aim of providing effective solutions that optimise value creation. If you develop ideas that go beyond existing paradigms in the way that EDAG does, you require equipment to match. In other words: Flexible tradespeople need flexible tools.

Those in charge at EDAG have found the right workshop equipment for prototype building and plant construction in the form of the clamping and welding table solutions from DEMMELER. Especially since DEMMELER's development engineers are willing to explore new ideas and support customers along the way.





EDAG PRODUCTION SOLUTIONS GMBH & CO. KG  $\cdot$  REESBERGSTRASSE 1  $\cdot$  36039 FULDA A SUBSIDIARY OF EDAG ENGINEERING AG







When tonnes of weight hang from a hook, it is essential for crane components to have a solid construction. This is a huge challenge for the production of Liebherr cranes. Heavy workpieces must be moved effectively, safely and precisely. This is precisely what the DEMMELER manipulators were designed to do. Not only do they enable an effective manufacturing process, they also create an ergonomic workplace. An optimum working position prevents fatigue and thereby ensures quality – preventive occupational safety that pays off.

↑ Modular and mobile clamping fixtures – lattice masts can be produced efficiently with the DEMMELER 3D clamping system.



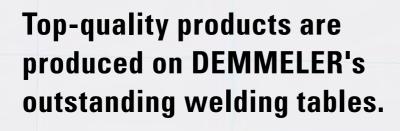




LIEBHERR WERK NENZING GMBH
DR. HANS LIEBHERR STR. 1 · 6710 NENZING · AUSTRIA







Production of the extension arm with Y-axis for the TRUMPF 3D laser cutting system, TruLaser Cell 7040. The Z-axis with the cutting head is attached to this



## TRUMPF is A leading high-tech company specialising in laser technology

Quality products that enjoy an excellent reputation around the world are manufactured in Ditzingen, Swabia. Applications for TRUMPF machine tools and lasers are used in a wide variety of industries, from the automotive industry to steel and sheet metal processing, aviation and aerospace to orthopaedics and medical technology.

TRUMPF GMBH + CO. KG (HOLDING)
JOHANN-MAUS-STRASSE 2 · 71254 DITZINGEN · GERMANY













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Heimertingen, 1st March 2022



# INVENTIONS BY DEMMELER THAT SPAN THE GLOBE.

We have been setting innovative standards in welding production for over 30 years.







3D CLAMPING SYSTEMS
MANIPULATORS
COBOT WELDSPACE 4.0®
NC ROTARY TABLES
TOOL ARENAS
CONTRACT MANUFACTURING



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