



THE welding table
THE ORIGINAL

DEMMELE® welding news

Original welding tables from the inventor. Made by DEMMELE®.

#2

2025

NEW

THE hardness

DemontXBlack



The high-performance
hardening process
for welding tables
from DEMMELE®

**DemontXBlack
760 and 890**



www.demmeler.com



The optimum 3D welding table
for every application
Page 6

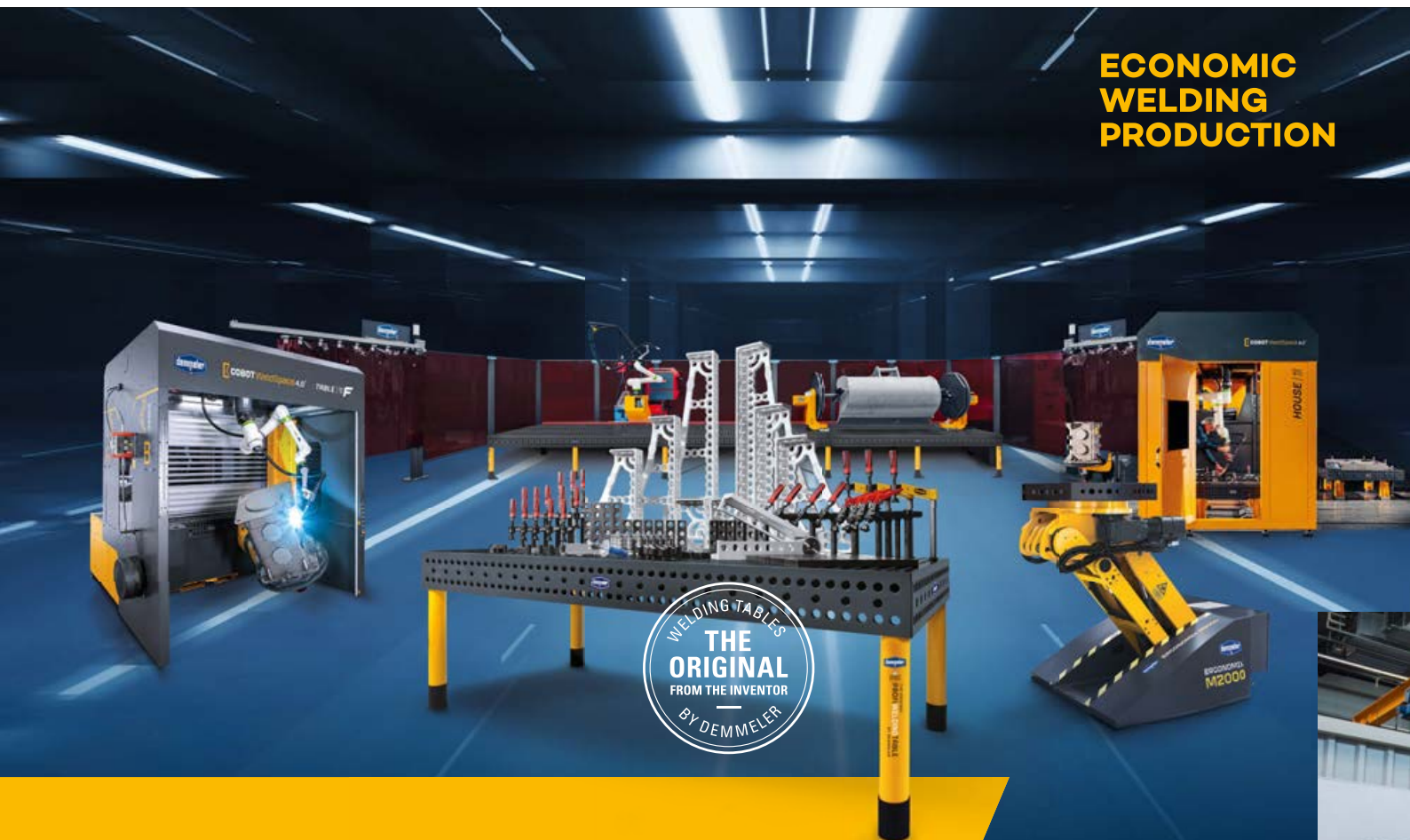


DEMMELE® professional equipment –
for maximum freedom and flexibility
Page 20



DEMMELE® Manipulators and turning units:
Welding and assembly in the optimum position
Page 28

**ECONOMIC
WELDING
PRODUCTION**



DEMMELER® MAKES THE DIFFERENCE

Our dream team for your efficient and economical welding production

The economic efficiency of welding is a complex issue and, due to the high level of productivity and quality pressures more relevant than ever. For a wide variety of welding tasks, the main focus is on speed and potential savings without compromising on welding quality. One of the most important questions is how work processes can be optimised in order to make the best possible use of the most valuable resource, the highly qualified welding specialist. **DEMMELER® will help you to do this.**



**Coming soon:
NEW ONLINE SHOP**



**Get personal advice
on site**
Authorised distributor
in your area.



OUR PERFORMANCE
makes THE DIFFERENCE

OUR PRODUCT SOLUTIONS – ALL WITH THE SAME GOAL:

Lower production costs

With the acquisition of a clamping system from DEMMELER, you not only receive solid production equipment but also a reliable calculation base.

Increase quality

With our modular system, you can set up your fittings exactly and quickly in a snap:

Machine housings, racks, frames, cross members, mounting brackets, railings, stairs, gates, control

cabinets, sheet metal coverings and much more can be quickly and conveniently clamped. With this system, you can set and fix the specified sizes for any work piece quickly and precisely.

Your individual welded components are clamped at the corresponding faces or points during the tacking and welding process for optimum positioning.



EVERY- THING FROM A SINGLE SOURCE.

**We are developers,
manufacturers and
users – the triple
competence for quality,
usability and efficiency**

Development and design at DEMMELER

At the DEMMELER development and design centre in Heimertingen, our specialists are continuously developing and working on new product developments that make work as efficient and smart as possible. We also focus on an extremely long durability of our products.

Made by professionals for professionals

As the inventor of the 3D clamping system, we are not only a manufacturer, but also use our products for our own production. Our most critical customer is therefore us.

Production at DEMMELER in Heimertingen "Made in Germany"

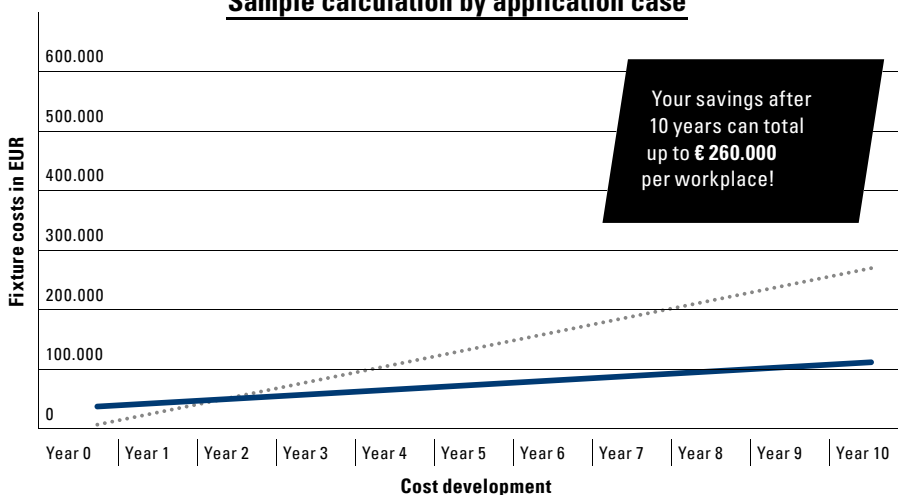
Our top trained specialists and highly automated production and guarantee a consistently high product quality.

Let us advise you:

By phone:
+49 (0) 83 35 / 98 59-0

By e-Mail:
sales@demmeler.com

Sample calculation by application case



Data basis for this example evaluation: Previous annual fixture costs EUR 20,000, time for clamping and unclamping per workpiece 12 minutes, 1000 clamping operations per year, EUR 44 labour costs/hour, compared to one-off net investment costs for 3D clamping system of EUR 23,000.

NEW

THE hardness

DemontXBlack

The high-performance process for welding tables from DEMMELER®

In the world of welding, the quality of the tools is crucial to success. DEMMELER has developed an innovative and sophisticated process that takes the performance and durability of welding tables to a new level: **DemontXBlack 760 and DemontXBlack 890**.



Selection of the base material

The process begins with the selection of a special base material – a high-alloy tool steel known for its exceptional basic hardness. This steel forms the basis for the outstanding properties of the welding tables and ensures high strength and stability.



Plasma nitriding

In the next step, the base material undergoes a state-of-the-art plasma nitriding process. This technology makes it possible to significantly increase the surface hardness by diffusing nitrogen into the surface of the steel. The result is an extremely hard and wear-resistant layer that protects the welding table from mechanical stress.



Post-oxidation

To further improve corrosion resistance, post-oxidation is carried out. This step creates a black oxide layer that is not only aesthetically pleasing but also provides an excellent barrier against environmental influences. This combination of plasma nitriding and post-oxidation ensures that DEMMELER welding tables are not only robust but also durable.

Original DEMMELER® 3D welding tables with the best properties: The two surface hardnesses from DEMMELER®

With **DemontXBlack 760 and DemontXBlack 890**, DEMMELER is setting new standards in welding technology. The sophisticated process of plasma nitriding combined with post-oxidation ensures exceptional surface hardness and corrosion resistance. Trust in the quality and innovation of DEMMELER to take your welding projects to the next level.



DemontXBlack 890

For the most demanding applications, the **DemontXBlack 890** is the ultimate solution. With even greater hardness and superior corrosion resistance, this welding table is designed for extreme conditions and offers unrivalled performance.



DemontXBlack 760

This variant offers an excellent balance between hardness and flexibility. Ideal for everyday use in the welding workshop, the **DemontXBlack 760** offers high resistance to abrasion and mechanical stress.

Quality
assurance
in the climate
chamber

Advantages of plasma nitriding with post-oxidation on DEMMELER® 3D welding tables

Minimal delay

Plasma nitriding causes minimal distortion thanks to low treatment temperatures. The process induces compressive stresses, which improves fatigue strength and reduces fatigue properties. Tests and measurements are naturally carried out in air-conditioned measuring rooms.



Higher protection against wear

The hardened surface extends the service life of the welding tables and makes them particularly resistant to scratches, nicks and wear. Even with intensive use, the flatness is maintained.



Reduced adhesion of welding spatter

Plasma nitriding reduces the adhesion of weld beads to the welding table surface. This makes maintenance easier.



Corrosion resistance and robustness

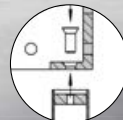
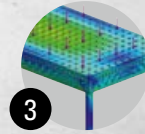
Oxidation immediately following plasma nitriding creates an additional corrosion protection layer. This results in a dark grey to black surface appearance.

Material comparison

		DemontXBlack 890	DemontXBlack 760	SOLID
Surface hardness	resistant to weld spatter	◆◆◆◆◆	◆◆◆◆◆	◆◆
Base hardness	for high impact resistance	◆◆◆◆◆	◆◆◆◆◆	◆◆◆
Protection against welding spatter	low adhesion	◆◆◆◆◆	◆◆◆◆◆	◆
Corrosion resistance	enhanced rust protection	◆◆◆◆◆	◆◆◆◆◆	◆
Load	high load capacities	◆◆◆◆◆	◆◆◆◆◆	◆◆◆◆◆◆◆
Evenness	for outstanding tool quality	◆◆◆◆◆	◆◆◆◆◆	◆◆◆◆◆◆◆
Conductivity	for best welding results when using the ground connection	◆◆◆◆◆	◆◆◆◆◆	◆◆◆◆◆◆◆
Lifetime	long-lasting protective effect	◆◆◆◆◆	◆◆◆◆◆	◆◆◆



Pivoting leg with robust M30 x 2 (system D28), M28 x 2 (system D22) or M24 x 2 (system D16) threaded spindle, precision-adjustable adjustment path of 30 mm.



Simple, stable mounting



You can also find out about compatible table legs and connecting elements online.

The optimum 3D welding table for every application. Top features for even more efficiency when welding.

Optimum positioning of the work piece not only makes work more accurate but also much more effective. Above all, the intelligent system grids and the flexible and well thought-out clamping tool range allow you unlimited clamping possibilities. Products from the original DEMMELER 3D clamping system stand out for their extreme robustness and durability. **Our 3D welding tables achieve the best surface properties with the specially optimised DemontXBlack hardening process. This makes them even more wear-free and durable.**

The system sizes D16, D22 and D28:





Don't compromise on your welding table and accessories. Choose the original from DEMMELE.

1 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 DEMMELE optimises the material properties of its welding tables and accessories and guarantees outstanding precision for optimum form fits.

2 Flexible clamping

Additional bores in the side posts for even more clamping options. For all D28 system ranges, 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.

3 Highly durable

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

4 No risk of catching or trapping

The leg sleeve prevents pinching and reduces wear of the tube assembly. It also protects the threaded spindle against dirt and wear. Fine adjustments are possible and fixing is stable and simple (M 30 x 2).

5 Precision work made easy

With coordinate marking of the bores in the X and Y directions and precision scaling.

6 Extremely solid for the highest loads

For the highest loads – 3000 kg per leg.

THE tough ones from DEMMELE – for the toughest requirements

- ▶ Reduced wear
- ▶ Protection against weld spatter adhesion
- ▶ Extremely robust and durable



The system grids of system sizes

For everyday, large welded constructions



D28 PROFIPremiumLINE (PP)

- Grid 50 x 50 mm
- 3-hole drilling pattern in the table side plates, 50 mm grid in the top and bottom rows with additional 100 mm grid in the middle



D28 PROFIPlusLINE (PL)

- Diagonal grid 100 x 100 mm
- 3-hole drilling pattern in the table side plates, 50 mm grid in the top and bottom rows with additional 100 mm grid in the middle



D28 ProfiEcoLine (PE)

- Grid 100 x 100 mm
- 3-hole drilling pattern in the table side plates, 50 mm grid in the top and bottom rows with additional 100 mm grid in the middle



D28 HobbyLINE (H)

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

For simple and medium-duty applications



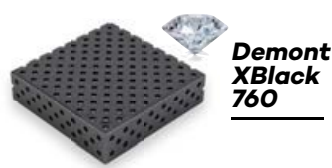
D22 PROFIPremiumLINE (PP)

- Grid 50 x 50 mm
- 3-row bore pattern on the table side plates, 50 x 50 mm diagonal grid



D22 PROFIPlusLINE (PL)

- Diagonal grid 100 x 100 mm
- 2-row bore pattern on the table side plates, 50 mm grid



D16 PROFIPlusLINE (PL)

- Diagonal grid 50 x 50 mm
- 3-row bore pattern on the table side plates, 50 mm grid in the top, middle and bottom row



D16 ProfiEcoLine (PE)

- Grid 50 x 50 mm
- 3-row bore pattern on the table side plates, 50 mm grid in the top, middle and bottom row

The 3D welding tables from the D28 system series. Our bestsellers – functional and versatile.

D28

DEMMELE® 3D WELDING TABLE PROFIPlusLINE (PL) 28



Plate height
200 mm

- Worktop with D28 system bores in a **100 x 100 mm double grid**
- 3-hole drilling pattern in the table side plates, **50 mm grid in the top and bottom rows with an additional 100-mm grid in the middle**
- Table sizes optionally available in hardened version, **DemontXBlack 760 and DemontXBlack 890**
- Precision scaling with millimetre graduation
- Coordinate marking of the bores in the X and Y directions

TABLE SIZE L X W

SOLID

DemontXBlack 760

DemontXBlack 890

TABLE WITH STANDARD LEG

TABLE HARDENED DXB 760 WITH STANDARD LEG

TABLE HARDENED DXB 890 WITH STANDARD LEG

1000 x 1000 mm

PL28-01001-001

PL28-01001-011

PL28-01001-021

1200 x 800 mm

PL28-11019-001

PL28-11019-011

PL28-11019-021

1500 x 1000 mm

PL28-01011-001

PL28-01011-011

PL28-01011-021

1200 x 1200 mm

PL28-01056-001

PL28-01056-011

PL28-01056-021

1500 x 1500 mm

PL28-01031-001

PL28-01031-011

PL28-01031-021

2000 x 1000 mm

PL28-01002-001

PL28-01002-011

PL28-01002-021

2000 x 2000 mm

PL28-01006-001

PL28-01006-011

PL28-01006-021

2400 x 1200 mm

PL28-01003-001

PL28-01003-011

PL28-01003-021

3000 x 1500 mm

PL28-01004-001

PL28-01004-011

PL28-01004-021

4000 x 2000 mm

PL28-01005-001

PL28-01005-011

PL28-01005-021

4800 x 2400 mm

PL28-11085-001

PL28-11085-011

PL28-11085-021

Special sizes available upon request! The table is also available in a stainless steel version on request.
Errors and changes reserved. Offer is non-binding.



Various foot variants can be configured for system size D28 depending on the application.



1 Standard leg

Pivoting legs, 650 ± 30 mm
(Optional: Length 750 ± 30 mm)

2 Telescopic leg

Pivoting legs, ± 30 mm
precision adjustment

3 Heavy-duty wheel leg

With ± 30 mm precision
adjustment, max. load
capacity 600 kg

4 Anchoring leg

With ± 30 mm precision
adjustment, for secure
attachment to the floor of the
production facility to protect
against tension, pressure
and movement

5 Scissor lift

Continuously variable height
adjustment





3D welding tables from DEMMELE®. Well-equipped.



D28 DEMMELE® 3D WELDING TABLE ProfiEcoLINE (PE) 28

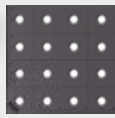


Plate height
200 mm

- Worktop with D28 system bores in a **100 x 100 mm grid**
- 3-hole drilling pattern in the table side plates, **50 mm grid in the top and bottom rows with an additional 100-mm grid in the middle**
- Table sizes optionally available in hardened version, **DemontXBlack 760 and DemontXBlack 890**
- Precision scaling with millimetre graduation
- Coordinate marking of the bores in the X and Y directions

TABLE SIZE L X W	SOLID TABLE WITH STANDARD LEG	DemontXBlack 760 TABLE HARDENED DXB 760 WITH STANDARD LEG	DemontXBlack 890 TABLE HARDENED DXB 890 WITH STANDARD LEG
1000 x 1000 mm	PE28-01001-001	PE28-01001-011	PE28-01001-021
1200 x 800 mm	PE28-11019-001	PE28-11019-011	PE28-11019-021
1500 x 1000 mm	PE28-01011-001	PE28-01011-011	PE28-01011-021
1200 x 1200 mm	PE28-01056-001	PE28-01056-011	PE28-01056-021
1500 x 1500 mm	PE28-01031-001	PE28-01031-011	PE28-01031-021
2000 x 1000 mm	PE28-01002-001	PE28-01002-011	PE28-01002-021
2000 x 2000 mm	PE28-01006-001	PE28-01006-011	PE28-01006-021
2400 x 1200 mm	PE28-01003-001	PE28-01003-011	PE28-01003-021
3000 x 1500 mm	PE28-01004-001	PE28-01004-011	PE28-01004-021
4000 x 2000 mm	PE28-01005-001	PE28-01005-011	PE28-01005-021
4800 x 2400 mm	PE28-11085-001	PE28-11085-011	PE28-11085-021

The length of the standard table legs in the basic configuration is 650 mm ± 30 mm.
Standard table legs are also available in a length of 750 mm ± 30 mm.

6 Table leg for spacer block
Connecting element between
U-shaped spacer blocks or
between 3D welding table and
support and base rail

7 Sliding leg with castors
Set-up system components
can be moved without using
lifting equipment or a crane

8 Connecting frame
Precise positioning
of 3D work tables

3D welding tables
can be set up
directly on our rail
system.



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



PROFIplusLINE

Well equipped from the start.

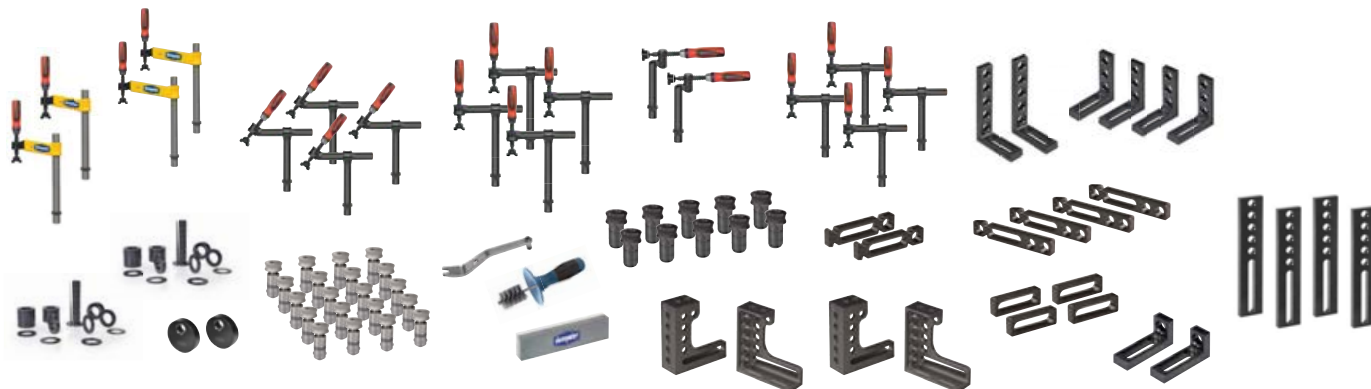
Selected clamping accessories in a set.

D28 D28 PROFIplusLINE Set 710

Item no.: D28-52000-710 (44-piece)

**D28 D28 PROFIplusLINE Set 720**

Item no.: D28-52000-720 (83-piece)

**D28 D28 PROFIplusLINE Set 730**
















Item no.: D28-52000-730 (120-piece)

Sets with
PPC bolts

Sets also available with PPC bolts instead of PC bolts. Surcharge for sets with PPC bolts:

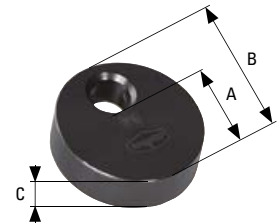
→ Set D711: Item no. D28-52000-711 | Set D721: Item no. D28-52000-721 | Set D731: Item no. D28-52000-731

You can individually assemble or supplement your sets with the large selection of DEMMELE® accessories. The DEMMELE® general catalogue is available at www.demmeler.com.

	D 710	D 720	D 730	Set components in detail	
	4	4	4	PE28-03001-000	Locating and clamping angle D28 PL, L175, bore/oblong hole
	2	4		D28-03001-005	Locating and clamping angle D28 PL small, L175, bore/oblong hole
	2	1		PL28-03002-000	Locating and clamping angle D28 PL 300, right
	2	1		PL28-03002-001	Locating and clamping angle D28 PL 300, left
	1			PL28-03003-000	Locating and clamping angle D28 PL 600, right
	1			PL28-03003-001	Locating and clamping angle D28 PL 600, left
	2	2	4	PE28-03008-000	Locating and clamping angle D28 PL large, L275, bore/oblong hole
	4	2	4	D28-05001-000	D28 large universal stop, L225
	4	2		D28-05003-000	Stop bar D28, L500
	2			D28-05003-001	Stop bar D28, L800
	2	4	4	D28-05009-000	Universal stop D28 L300
	2			D28-05013-000	Stop disc D28, dia. 75 mm
	2	2		D28-05013-001	Stop disc D28, dia. 100 mm
	2			D28-05013-010	Angle-setting template D28
	4	4	4	D28-05015-000	Sliding stop D28, L150
	12	20	24	D28-06001-000	PC bolt D28, short, WAF 14
	2			D28-06002-000	PC bolt D28, long, WAF 14
	6	10	12	D28-06009-000	D28 stop and positioning bolt
	2	2		D28-07001-000	Compensating screw clamp D28 150, L350, spindle
	4	2	2	D28-07002-000	Compensating screw clamp D28 200, L350, spindle
	4	4		D28-07005-000	Screw clamp 180° D28, L270, spindle
	4	4		D28-07005-014	Screw clamp 180° D28, L350, spindle
	4			D28-07005-015	Screw clamp 180° D28, L350, quick-action clamping cylinder
	2	4		D28-07008-000	Variable screw clamp 90° D28, L150, spindle
	4	4	4	D28-07009-000	Variable screw clamp 45° D28, L270, spindle
	4			D28-07009-011	Variable screw clamp 45° D28, L270, spindle
	2	2		D28-09001-000	11-piece support set D28, 5–100 mm
	2			D28-09001-005	Support set with thread D28, 22–105 mm, continuously variable
	8			D28-09003-000	V-block holder D28, dia. 58 mm
	1	1	1	D28-10002-000	Round brush D28, splash guard
	1	1		D00-10007-000	Bench stone, L200, two-sided rough/fine
	1			D00-10009-000	Earth connection D28/D22/D16
	1	1	1	D00-10016-001	Assembly lever, L250, WAF 14



Continuously adjustable by turning



D28 Stop disc

- Can be used as a stop or support
- Secured with PPC bolt/PC bolt or connecting bush
- Minimal space requirements
- Hardened steel
- (1) A 50 mm, B 75 mm, C 25 mm
- (2) A 75 mm, B 100 mm, C 25 mm

(1) Item No.: D28-05013-000
(2) Item No.: D28-05013-001

Also available in system sizes D22 and D16.





The 3D welding tables from the D22 system series – for straightforward and moderately difficult applications

D22

DEMMELER® 3D WELDING TABLE PROFIPremiumLINE (PL) 22

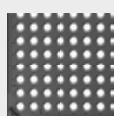
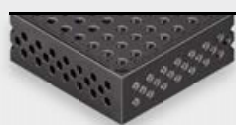


Plate height
150 mm

- Worktop with D22 system bores in a **50 x 50 mm grid**
- 3-row bore pattern on the table side plates in **50 x 50 mm diagonal grid**
- Table sizes optionally available in hardened version, **DemontXBlack 760**
- Precision scaling with millimetre graduation
- Coordinate marking of the bores in the X and Y directions



TABLE SIZE
L X W

1000 x 1000 mm

2000 x 1000 mm

2400 x 1200 mm

3000 x 1500 mm

SOLID

TABLE
WITH STANDARD LEG



PP22-01001-001

PP22-01002-001

PP22-01003-001

PP22-01004-001

THE hardness
DemontXBlack
DEMMELER PREMIUM QUALITY



DemontXBlack 760

TABLE HARDENED DXB 760
WITH STANDARD LEG



PP22-01001-011

PP22-01002-011

PP22-01003-011

PP22-01004-011

Special sizes available upon request! The table is also available in a stainless steel version on request.

D22

DEMMELER® 3D WELDING TABLE PROFIPlusLINE (PL) 22



Plate height
150 mm

- 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 hardened version, **DemontXBlack 760**
- Precision scaling with millimetre graduation
- Coordinate marking of the bores in the X and Y directions



TABLE SIZE
L X W

1000 x 1000 mm

2000 x 1000 mm

2400 x 1200 mm

3000 x 1500 mm

SOLID

TABLE
WITH STANDARD LEG



PL22-01001-001

PL22-01002-001

PL22-01003-001

PL22-01004-001

THE hardness
DemontXBlack
DEMMELER PREMIUM QUALITY



DemontXBlack 760

TABLE HARDENED DXB 760
WITH STANDARD LEG



PL22-01001-011

PL22-01002-011

PL22-01003-011

PL22-01004-011

Special sizes available upon request! The table is also available in a stainless steel version on request.

Different leg versions are possible for this system size D22



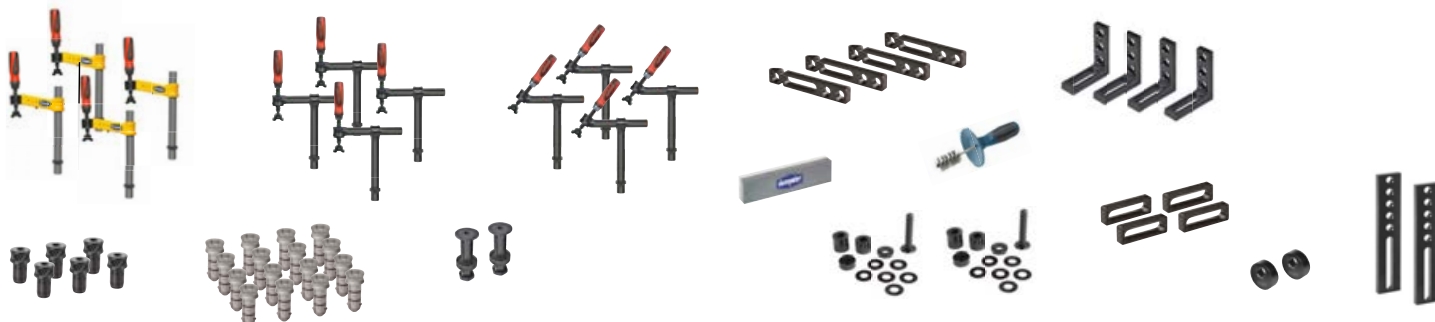
- Standard table leg with a length of 700 ± 30 mm (optional: Length of 800 ± 30 mm)
- Telescopic leg (standard leg) with robust M24 x 60 threaded spindle, precision-adjustable by ± 30 mm
- Heavy-duty wheel
- Anchoring leg





















Errors and changes reserved.
Offer is non-binding.

Selected clamping accessories in a set. As starter sets or as extensions.

D22 D22 PROFiPlusLINE Set 720

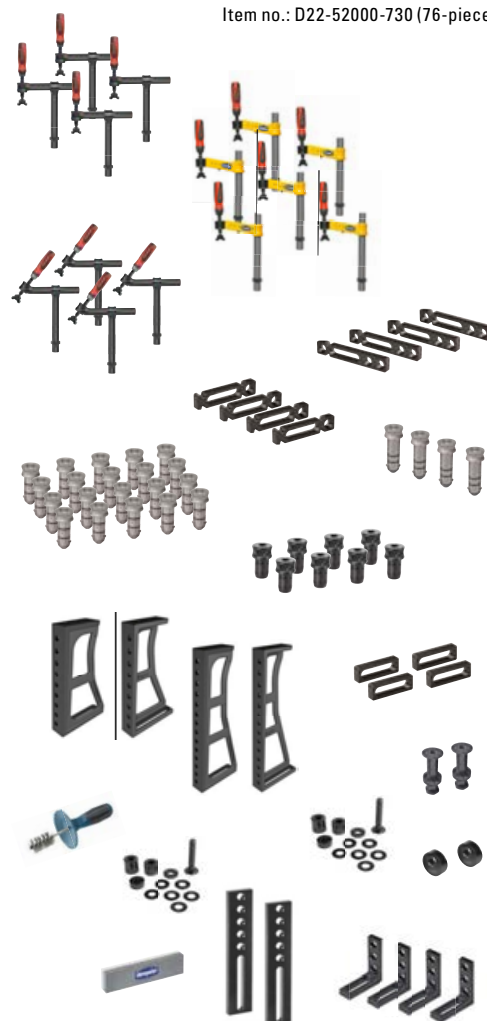
Item no.: D22-52000-720 (56-piece)



D 720	Set components in detail			D 730
	1	PE22-03003-000	Locating and clamping angle D22 PE 500, right	
	1	PE22-03003-001	Locating and clamping angle D22 PE 500, left	
	1	PE22-03004-000	Locating and clamping angle D22 PE 750, right	
	1	PE22-03004-001	Locating and clamping angle D22 PE 750, left	
	16	20	E22-06025-000	EcoLINE bolt D22, short, WAF 6
	4		E22-06026-000	EcoLINE bolt D22, long, WAF 6
	6	8	D22-06009-000	D22 stop and positioning bolt
	2	2	D22-09001-005	Support set with thread D22, 22–100 mm, continuously variable
	2	2	D22-05013-000	Stop disc D22, dia. 75 mm
	2	2	D22-09001-000	11-piece support set D22, 5–100 mm
	4	4	D22-05015-000	Sliding stop D22, L150
	4		D22-05001-000	D22 large universal stop, L225
	4	4	D22-05009-000	Universal stop D22 L300
	4	4	PE22-03001-000	Locating and clamping angle D22 PL, L175, bore/oblong hole
	2	2	D22-05003-000	Stop bar D22, L500
	4	4	D22-07009-000	Variable screw clamp 45° D22, L300, spindle
	4	4	D22-07005-000	Screw clamp 180° D22, L300, spindle
	4	6	D22-07001-000	Compensating screw clamp D22, L300, spindle
	1	1	D22-10002-000	Round brush D22, splash guard
	1	1	D00-10007-000	Bench stone, L200, two-sided rough/fine

D22 D22 PROFiPlusLINE Set 730

Item no.: D22-52000-730 (76-piece)



Sets with
PPC bolts

Sets also available with PPC bolts instead of EcoLINE bolts. Surcharge for sets with PPC bolts:

→ Set D721: Item no. D22-52000-721 | Set D731: Item no. D22-52000-731



The 3D welding tables from the D16 system series – for delicate applications

D16

DEMMELE® 3D WELDING TABLE PROFIPlusLINE (PL) 16



- Worktop with D16 system bores in a **50 x 50 mm double grid**
- Three-row bore pattern on the table side plates, **50 mm grid in the top, middle and bottom rows**
- Table sizes optionally available in hardened version, **DemontXBlack 760**
- Precision scaling with millimetre graduation
- Coordinate marking of the bores in the X and Y directions

Special sizes available upon request! The table is also available in a stainless steel version on request.

¹Consists of 2x 1500 x 1500 x 100 mm.



TABLE SIZE
L X W

1000 x 500 mm

1000 x 1000 mm

1200 x 800 mm

1200 x 1200 mm

1500 x 1000 mm

1500 x 1500 mm

2000 x 1000 mm

2400 x 1200 mm

3000 x 1500 mm¹

SOLID

TABLE
WITH STANDARD LEG



PL16-01000-001

PL16-01001-001

PL16-11019-001

PL16-01056-001

PL16-01017-001

PL16-01011-001

PL16-01002-001

PL16-01003-001

PL16-01004-001

THE hardness
DemontXBlack
DEMMELE PREMIUM QUALITY



DemontXBlack 760

TABLE HARDENED DXB 760
WITH STANDARD LEG



PL16-01000-011

PL16-01001-011

PL16-11019-011

PL16-01056-011

PL16-01017-011

PL16-01011-011

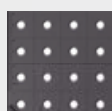
PL16-01002-011

PL16-01003-011

PL16-01004-011

D16

DEMMELE® 3D WELDING TABLE ProfiEcoLINE (PE) 16



- Worktop with D16 system bores in a **50 x 50 mm grid**
- Three-row bore pattern on the table side plates, **50 mm grid in the top, middle and bottom rows**
- Table sizes optionally available in hardened version, **DemontXBlack 760**
- Precision scaling with millimetre graduation
- Coordinate marking of the bores in the X and Y directions

Special sizes available upon request! The table is also available in a stainless steel version on request.

¹Consists of 2x 1500 x 1500 x 100 mm.



TABLE SIZE
L X W

1000 x 500 mm

1000 x 1000 mm

1200 x 800 mm

1200 x 1200 mm

1500 x 1000 mm

1500 x 1500 mm

2000 x 1000 mm

2400 x 1200 mm

3000 x 1500 mm¹

SOLID

TABLE
WITH STANDARD LEG



PE16-01000-001

PE16-01001-001

PE16-11019-001

PE16-01056-001

PE16-01017-001

PE16-01011-001

PE16-01002-001

PE16-01003-001

PE16-01004-001

THE hardness
DemontXBlack
DEMMELE PREMIUM QUALITY



DemontXBlack 760

TABLE HARDENED DXB 760
WITH STANDARD LEG



PE16-01000-011

PE16-01001-011

PE16-11019-011

PE16-01056-011

PE16-01017-011

PE16-01011-011

PE16-01002-011

PE16-01003-011

PE16-01004-011

Different foot variants are possible for these system sizes



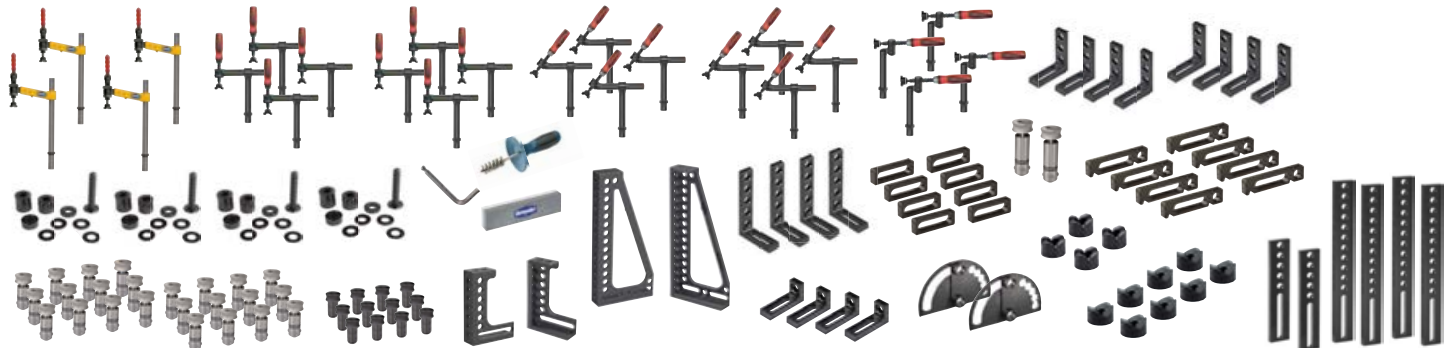
- Standard table leg with a length of 750 ± 30 mm (optional: Length of 850 ± 30 mm)
- Telescopic leg with robust M24 x 2. Threaded spindle, finely adjustable ± 30 mm
- Heavy-duty wheel
- Anchoring leg


Errors and changes reserved.
Offer is non-binding.

Selected clamping accessories in a set. As starter sets or as extensions.

D16 D16 PROFIPlusLINE Set 720

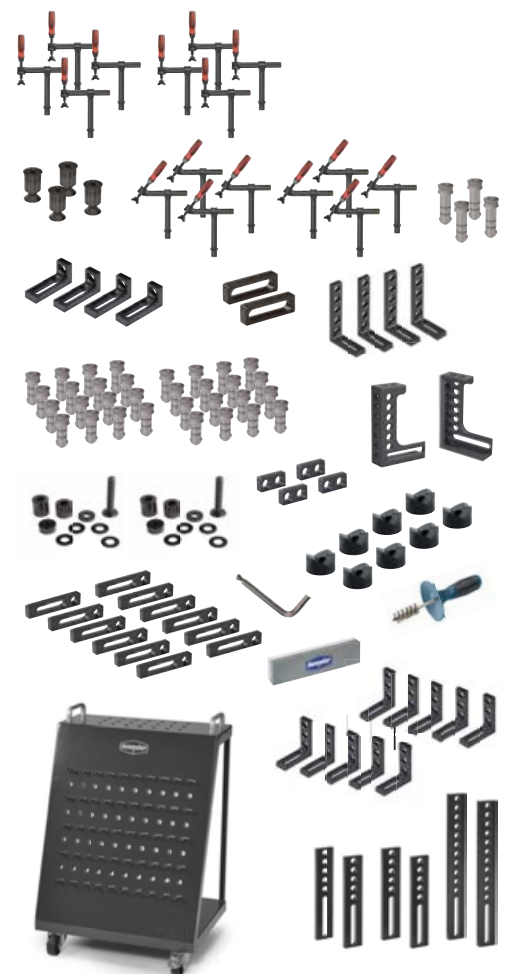
Item no.: D16-52000-720 (125-piece)



	D 720	E 730		Set components in detail
	8		D16-03001-000	Locating and clamping angle D16 PL, L90, bore/oblong hole
	4		D16-03001-002	Locating and clamping angle D16 PL small, L90, bore/oblong hole
	10		E16-03001-000	Locating and clamping angle D16 PE, L90, bore/oblong hole
	4		E16-03001-002	Locating and clamping angle D16 PE small, L90, bore/oblong hole
	12		E16-05001-000	Universal stop D16 PE large, L115
	4		E16-05002-000	Universal stop D16 PE small, L55
	1	1	D16-03002-000	Locating and clamping angle D16 PL 200, right
	1	1	D16-03002-001	Locating and clamping angle D16 PL 200, left
	1		D16-03003-000	Locating and clamping angle D16 PL 400, right
	1		D16-03003-001	Locating and clamping angle D16 PL 400, left
	4	4	D16-03008-000	Locating and clamping angle D16 PL large, L140, bore/oblong hole
	8		D16-05001-004	Universal stop D16 large, L115, two notches
	2	4	D16-05003-000	Stop bar D16, L250
	4	2	D16-05003-001	Stop bar D16, L400
	2		D16-05013-010	Angle-setting template D16
	8	2	D16-05015-000	Sliding stop, L150
	24		D16-06001-000	PC bolt D16, short, WAF 8
	2		D16-06002-000	PC bolt D16, long, WAF 8
	32		E16-06001-000	EcoLINE bolt D16, short, WAF 5
	4		E16-06002-000	EcoLINE bolt D16, long, WAF 5
	4		D16-06003-000	Connecting bush D16, short, screw, WAF 6
	12		D16-06009-000	D16 stop and positioning bolt
	4		D16-07001-001	D16 compensating screw clamp, L250, quick-action clamping cylinder
	8	8	D16-07005-000	Screw clamp 180° D16, L130, spindle
	4		D16-07008-000	Variable screw clamp 90° D16, L150, spindle
	8	8	D16-07009-000	Variable screw clamp 45° D16, L130, spindle
	4	2	D16-09001-000	9-piece support set D16, 5–50 mm
	4		D16-09004-000	V-block holder D16, dia. 50 mm
	8	8	D16-09003-000	V-block holder D16, dia. 80 mm
	1	1	D16-10002-000	Round brush D16, splash guard
	1	1	D00-10007-000	Bench stone, L200, two-sided rough/fine
	1	1	D16-10008-000	Hex key WAF 8, ball head
	1		D16-11001-002	Accessory cart D16

D16 D16 PROFIEcoLINE Set 730

Item no.: E16-52000-730 (114-piece)



DEMMELE welding and clamping systems are modular and flexible. All sets and accessories can be used at all the 3D worktables within the system. What's more, you can individually assemble or add to your sets with the wide selection of DEMMELE accessories. The 308-page DEMMELE general catalogue is available at www.demmeler.com.



Our 3D clamping system for projects involving large components

For more information about and configuration options for the DEMMELE® rail system, visit www.demmeler.com or take a look at our main catalogue.



Production of components up to a length of 80 metres and more!



Authorised sales partner near you.



Patented sliding legs with castors
System components are easy to move

Planning, installation and acceptance – everything from a single source!
Let us advise you.

The benefits of the base rail system from DEMMELE



The very highest quality in component production thanks to optional laser measuring of your rail system.



Flexible and modular
Combine all system components in conjunction with your rail system. A precise bore grid over long distances from A to Z. Reproduce the system accuracy on your workpieces.



Accuracy
The best accuracy for your large-scale components thanks to an even clamping surface across the entire work area.



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

The flexible DEMMELE® 3D clamping system grows with your tasks.

The versatility of the rail system allows you to flexibly extend or divide work areas, giving you decisive advantages when dealing with changing component sizes or different work steps. Countless clamping options result from the combination of 3D welding tables, spacer angles and accessories. The patented DEMMELE® sliding feet with castors can be easily moved on the DEMMELE® support and foundation rails and positioned precisely.





Lifting heavy loads using 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.



Designed for loads up to
max. 1–6 tonnes depending
on the table size (minus the
weight of the worktop)

Make your production process more flexible. U-shaped spacer blocks grow to meet your requirements.

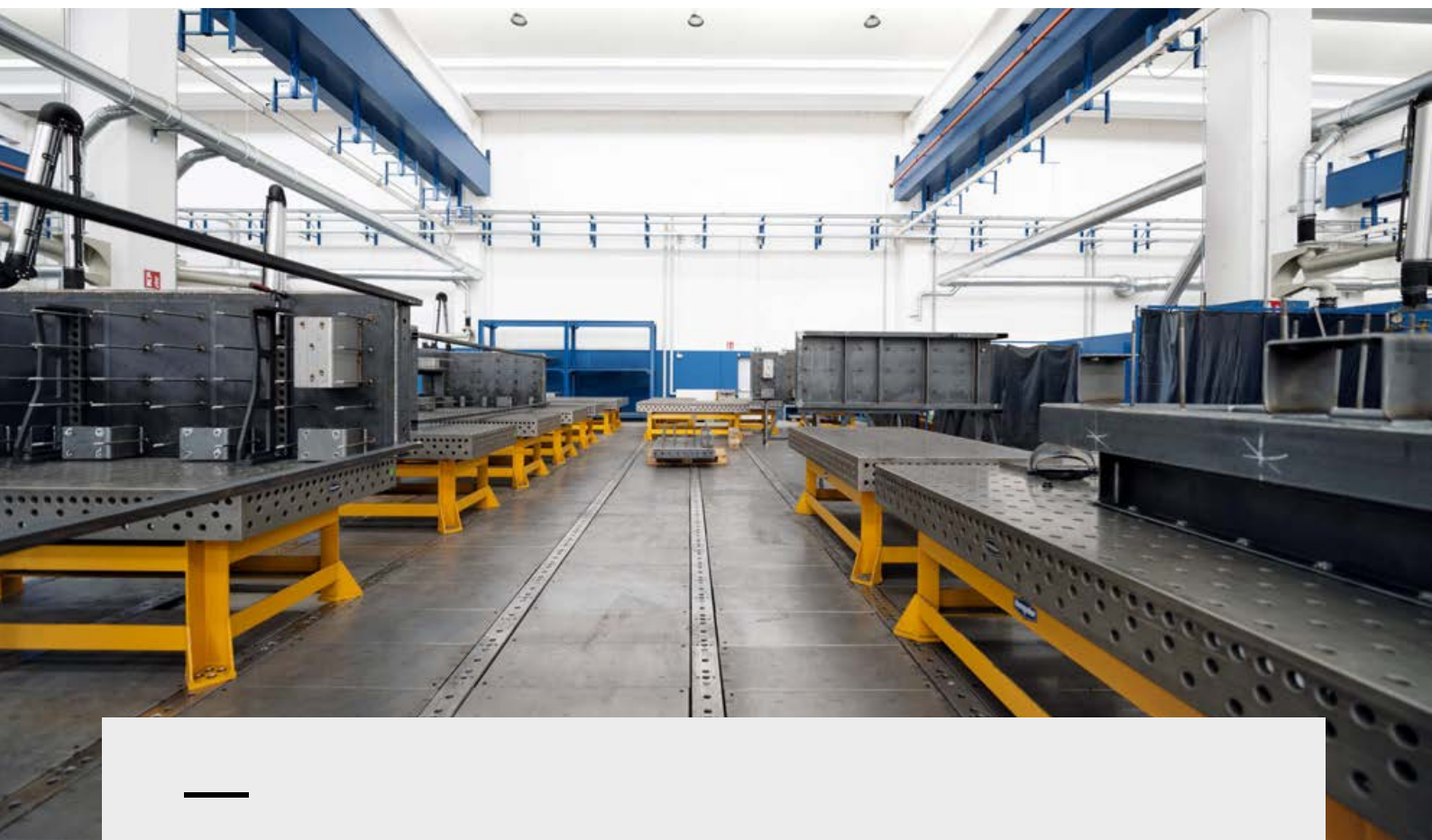
Our U-shaped spacer blocks offer limitless possibilities. Whether as a frame, fixture, table extension or for module use on the rail system – the possibilities are almost limitless.



Find out more about U-shaped
spacer angles in many sizes
and designs online.



D28
D22
D16



Tecnolafer S.r.l.

Metal construction specialist from Italy with 40 years of experience in the implementation of large-scale metal construction projects

‘We get where others stop’: this is the promise that Tecnolafer makes to its customers, and always keeps. Starting with 3D design and prototyping developed by its technical department, the company is structured to provide all types of services related to metalworking: 2D and 3D laser cutting, CNC bending, assembly and welding, mechanical and stainless steel processing, and installation.

Tecnolafer is able to give its customers exactly what they expect, achieving all their set objectives. Founded in 1985 by owner Stefano Ceriani as LAFER SAS, dedicated to the construction of iron and stainless steel gates and fences and handcrafted products, the company has evolved over the years, continuously raising the bar and offering an increasingly comprehensive range of services.

In order to meet its own high quality standards and those of its demanding customers, Tecnolafer relies on DEMMELER's highly productive 3D clamping system with its enormous versatility in its welding production. This constant drive for improvement and growth has enabled

Tecnolafer to develop a wide range of skills and acquire various certifications, allowing it to operate in sectors that require a high degree of specialisation, such as railways, nuclear power and oil & gas. Among its most ambitious projects are the construction and installation of guardrails for the Punta Helbronner station (3,466 m) for the Skyway Monte Bianco, the construction of housings for ABB electric motors for LINE 2 of the Milan Metro, the production of Claus Burners for gas incinerators and sulphur recovery units, and the Venture Global LNG contract for the supply of natural gas liquefaction systems.

Tecnolafer has installed a production line using the DEMMELE® 3D clamping and base rail system, which enables metal structures to be manufactured on an area measuring 20 x 8 metres.



MANUFACTURING AND EXPERTISE AT THE HIGHEST LEVEL

In 2015, the company was involved in the construction of stainless steel railings for the stairs and panoramic terraces of the Skyway Monte Bianco arrival station, a landmark in the world of cable transport infrastructure. The client required the entire development of the project, high and certified expertise in the processing of stainless steel in the construction of structural components and its surface treatment, as well as delivery and installation at Punta Helbronner, at 3.466 metres above sea level, in complex environmental conditions and with limited oxygen supply due to the very high altitude. Tecnolafer's expertise and decades of experience in the construction and architectural sector were fundamental to the success of the project, allowing the company to enrich its portfolio in the field of structural carpentry with a highly important international reference.



'We get where others stop': with the Punta Helbronner Project, Tecnolafer has once again pushed the boundaries, designing, building and installing the railings for the stairs and panoramic terraces of the Skyway Monte Bianco arrival station, at an altitude of 3.466 metres.



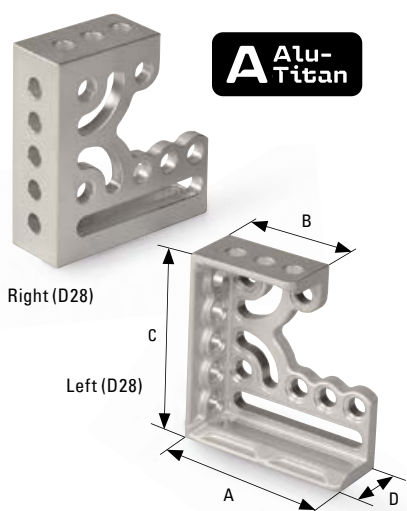
Tecnolafer

TECNOLAFAER S.R.L. A SOCIO UNICO
V.LE ENRICO MATTEI 15/17 - 20003 CASOREZZO (MI) - ITALY

Ultimate versatility with products from DEMMELE



90° kidney-shaped system groove allows for continuous angle adjustment



D28 Clamping and locating angle D28 PP 300 / D22 PP 250 aluminium-titanium

- Stiffeners in the corners with 90° system groove in kidney shape
- Hole grid at 50 mm intervals, also on all angle sides
- Extended face plate with additional bore
- 4 stop faces / usable surfaces
- 2x system groove in 90° kidney shape
- With precision scaling
- Anodised
- D28: A 275 mm, B 180 mm, C 300 mm, D 100 mm
D22: A 225 mm, B 180 mm, C 250 mm, D 80 mm

D28 PP 300, Item No.:
P28-03002-002 (right)
P28-03002-003 (left)

D22 PP 250, Item No.:
P22-03002-002 (right)
P22-03002-003 (left)



Find out about the entire range of stops and clamping brackets online:



Our clamping bolts for all of your applications

Quick Tips



PPC bolt

System sizes

D28 D22

Version

Short/long

Use

Reliable fixing of workpieces with system components or on the welding table in a way that reduces material wear



PPC countersunk bolt

D28 D22

Short/long

Space-saving connecting element that reduces material wear for all system components on tables, perforated plates, etc.



PC bolt

D28 D16

Short/long

Reliable fixing of workpieces with system components or on the welding table in a way that reduces material wear



PC countersunk bolt

D28 D16

Short/long

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

Original DEMMELER® PPC clamping bolt: Self-centring, force-locked and low-wear clamping

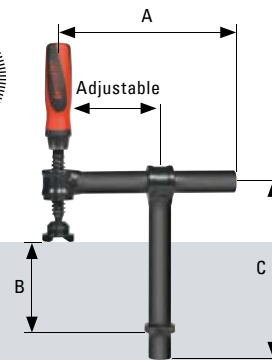


D28 THE ORIGINAL – PATENTED – **D22** PPC bolt D28 / D22

- Highest clamping force with large stroke
- Polygon-shaped expansion elements reduce the wing loading
- Very quick to clamp and unclamp
- Force-locking through full-area contact
- Easy on materials
- Limit clamping range:
PPC D28, short: 41-47 / PPS D28, long: 66-72
PPC D22, short: 31-34 / PPS D22, long: 49-52

PPC bolt D28, short
Item No.: D28-06025-000
PPC bolt D28, long
Item No.: D28-06026-000

PPC bolt D22, short
Item No.: D22-06025-000
PPC bolt D22, long
Item No.: D22-06026-000



For fast and precise clamping

D28 Screw clamp 180° D28 with spindle

- With adjustable, robust round tube, each tube can be used individually
- Entire clamping mechanism is exchangeable
- Exchangeable clamping pad
- (1) A 220 mm, B 190 mm, C 270 mm,
(2) A 220 mm, B 270 mm, C 350 mm
(3) A 220 mm, B 420 mm, C 500 mm
- Weight: 2,80 kg (1), 3,10 kg (2), 3,80 kg (3)

(1) Clamp capacity max. 190 mm
Item No.: D28-07005-000
(2) Clamp capacity max. 270 mm
Item No.: D28-07005-014
(3) Clamp capacity max. 420 mm
Item No.: D28-07005-033



You can find suitable
accessories for screw
clamps online at
www.demmeler.com

→ You will find our entire range of clamping bolts and further information online at www.demmeler.com.



EcoLINE Bolzen

D28 D22 D16

System sizes

Version

Short/long

Connecting element for
all system components

Use



Stop and positioning bolt

D28 D22 D16

Short/long

For setting out the
system components, to fix
them in position and as an
adapter for D16 screw clamps



Connecting bushes with bolt

D28 D22 D16

Short/long

Use as a long-term
connection for joining
all system components
or welding tables



Connecting bush with collar

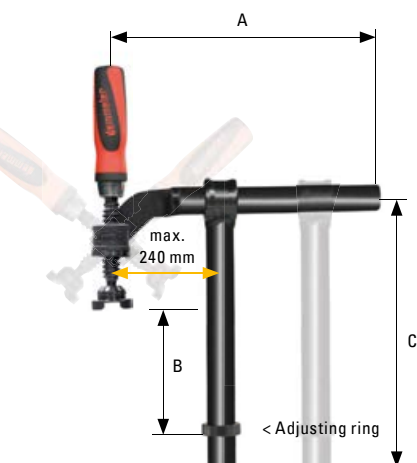
D28 D16

Short

Long-term connection
for joining two system
components (suitable for
system bore/oblong hole)

Perfect handling with the DEMMELE® performance screw clamp

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

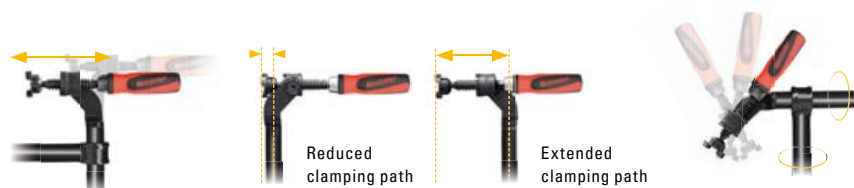


D28 Performance screw clamp D28 with spindle

- 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
- Can be folded together flat (less storage space required)
- With three exchangeable actuators (spindle, short spindle and quick-action clamping cylinder)
- A 240 mm, B max. 250 mm, C 270 mm
- Approx. weight 2,9 kg

Item no.: D28-07009-033

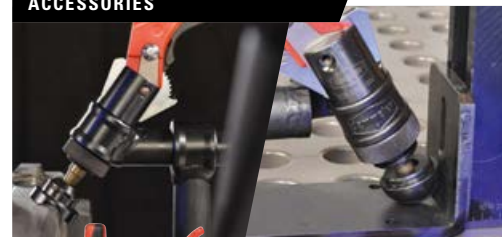
// PRODUCT TIP



Clamping spindle can be adjusted over 130 mm by rotating the retaining tube. 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.

Infinitely variable swivelling and 360° rotation enables precise clamping in any position.

ACCESSORIES



Configure your clamp –

from the length of the round tubes and the actuator through to the choice of the clamping pad.



You can find suitable accessories for screw clamps online at www.demmeler.com

NEW



The new pipe clamping technology from DEMMELER®

DEMMELE® Multi-RST – Lightning-fast clamping and release

- Very flat design, therefore no interfering edges in the working area
- Safe and lightning-fast clamping and release
- Worker's wrists are spared strain
- Two-point and multi-point clamping possible
- Individual parts are interchangeable
- Ideal for use in robot welding

PROPERTY RIGHTS REGISTERED

Item no. 00231192

Functionality and possible applications



A large flat clamping range allows for a wide variety of clamping options.



Ideal for the inner tension area.



Multi-point clamping possible using clamping bridge (clamping tube is swivelling).



Movable clamping points

A

B

Suitable for screw clamp spindle

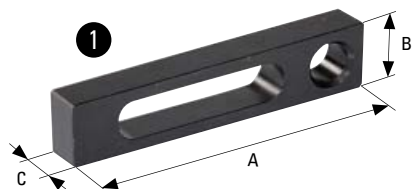
D28 2P. Clamping bridge with two clamping pads

- Two clamping points at the same time
- Clamping in hard-to-reach positions
- Clamping uneven surfaces or different heights through pendulum compensation
- Clamping pad distance can be shifted with self-locking ball pins
- Scope of delivery: Galvanised clamping bridge, two spherical pins and two clamping pads (steel)
- A 130 / 97,5 / 65 mm, B \varnothing 35 mm

Item no.: D28-07018-000



Flexible stop – Infinitely adjustable via slotted hole

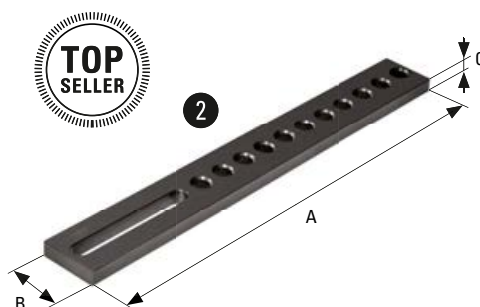


D28 Universal stop PROFIEcoLINE **D16** large

- Combination of system bore/oblong hole for numerous clamping options
- Basic version
- Hardened steel (D28), Burnished steel (D16)
- D28: A 225 mm, B 50 mm, C 25 mm
- D16: A 115 mm, B 25 mm, C 12 mm
- Approx. weight: D28: 1,4 kg, D16: 0,16 kg

D28: Item no.:
E28-05001-000
D16: Item no.:
E16-05001-000

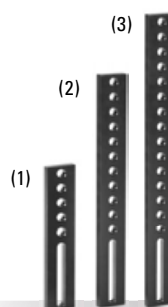
Flexible use with a large number of clamping options



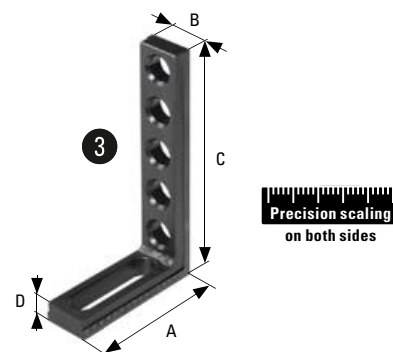
D28 Stop bar

- Combination of system bore/oblong hole
- Very long and sturdy design, resulting in a large locating surface for large components or long distances
- Continuous adjustment via oblong hole
- Hardened steel (also available in aluminium)
- Also available in D16 and D22 system sizes
- (1) A 500 mm, B 100 mm, C 25 mm
- (2) A 800 mm, B 100 mm, C 25 mm
- (3) A 1000 mm, B 100 mm, C 25 mm
- Approx. weight: (1) 8,0 kg, (2) 13,0 kg, (3) 16,48 kg

(1) Item no.: D28-05003-000
(2) Item no.: D28-05003-001
(3) Item no.: D28-05003-008



For quick clamping with accurate positioning



D28 Locating and clamping angle PE **D16** large

- Combination of system bores/oblong hole for numerous clamping options
- Two full angle surfaces – therefore can be used from both sides
- Compatible with all locating and clamping angles so that the oblong hole can be used to form a height-adjustable support
- Hardened cast (D28), Burnished steel (D16)
- D28: A 175 mm, B 50 mm, C 275 mm, D 25 mm
- D16: A 90 mm, B 25 mm, C 140 mm, D 12 mm
- Approx. weight: D28: 2,4 kg, D16: 0,32 kg

D28: Item no.:
PE28-03008-000

D16: Item no.:
D16-03008-000

Time is money, your tools must be ready to hand.



Mobile accessory trolleys in any system size

D28 D22 D16 Accessory cart

- Establishes a tidy and orderly workstation
- Faster access to the system components
- Large angles are safely and conveniently stored inside the cart
- Fast to transport thanks to four sturdy 360° swivelling casters, one of them locking.
- System components not included in the scope of delivery.
- D28: A 1000 mm, B 650 mm, C 1010 mm, weight: approx. 60 kg
- D22: A 800 mm, B 503 mm, C 1068 mm, weight: approx. 55 kg
- D16: A 600 mm, B 450 mm, C 870 mm, weight: approx. 35 kg

Accessory cart D28:
Item no.: D28-11001-000

Accessory cart D22:
Item no.: D22-11001-000

Accessory cart 16:
Item no.: D16-11001-002

D16 Tool trolley D16

- Four closed drawers protect the contents against from contamination and provide quick access to the system parts
- Locking
- Mobile on four casters, two of them swivelling and locking
- System components not included in the scope of delivery
- A 740 mm, B 560 mm, C 970 mm

Item no.: D16-11001-000

Optionally
with two or three
drawer units



Simple attachment of the "smart toolbox" via system bore hole. Connecting elements are included in the scope of delivery. System components are not included in the scope of delivery.

D28 smart toolbox for 3D welding table D16 systems D28

- The ideal complement to the "clever toolbox"
- Robust drawer base units made of sheet steel
- Optionally with two or three drawer elements
- Protects tools and small parts safely from dirt and welding spatter
- Max. Load capacity "smart toolbox" approx. 125 kg
- Max. Load capacity per drawer approx. 50 kg
- A 640 mm, B 575 mm, C 485 mm, D 515 mm

(1) Underbench drawer cabinet with two drawer pull-outs

D28: Item no.: D28-11001-032

D16: Item no.: D16-11001-032

(2) Underbench drawer cabinet with three drawer pull-outs

D28: Item no.: D28-11001-033

D16: Item no.: D16-11001-033

← Dynamic and simultaneous welding in multi-station operation

- The extremely versatile welding automation solution for the highest possible efficiency, very simple operation and maximum protection of the environment and operator
- Up to four Space A (optional A1-A2) + Space B workspaces for optimal accessibility from all sides and crane loading for setting up and tool changes
- Default shuttle operation between Space A and B enables setting up, reclamping and welding to be carried out at the same time
- DEMMELER® WeldSoft F 1.2 Software: The best settings tailored to the power source, welding process and torch with simple and fast operation
- Optionally with cobot from Universal Robots UR or FANUC

DEMMELER® COBOT WeldSpace 4.0®
TABLE 24/12



THE FUTURE OF COBOTV

DEMMELER® COBOT WeldSpace 4.0®
LINEAR



Highly efficient welding of components up to 12 metres in length

- The Fanuc CRX collaborative welding robot travels on a dynamic linear axis (mathematically coupled for synchronised movements with the robot – 7th axis).
- In addition to the robot, the welding power source, the wire supply, the welding fume extraction system and the torch cleaning station also move.
- Integrated DEMMELER® 3D welding tables D28 measuring 3000 x 1500 mm (available in lengths of 3 m, 6 m, 9 m and 12 m thanks to their modular design).
- Full accessibility: The welding protection wall can be completely folded away at the front. The system is open at the top and can be loaded by crane or forklift truck.
- Dividing the workspace into SPACE A1 and A2 using a partition wall creates an additional workstation and enables highly efficient working in two-station operation.
- The integrated single-axis manipulator with counter bearing positions workpieces weighing up to 2,000 kg in the optimum welding position, eliminating the need for time-consuming reclamping of workpieces.



OUR PERFORMANCE
makes THE DIFFERENCE

The future of welding

Maximum productivity: Individually configurable workspaces

- The Fanuc CRX collaborative welding robot travels on a dynamic linear axis
- The linear axis, which is fully mathematically integrated into the cobot controller, enables complex and efficient processing of even the most demanding components.
- Large workspace 3500 x 1500 x 2000 mm for ultimate flexibility
- Option of two separate workspaces with dimensions of 1500 x 1500 x 2000 mm each thanks to removable partition wall and four roller shutter doors
- Optional DEMMELER two-axis manipulator with load capacity of 500 kg
- Can be optionally configured with the DEMMELER base rail system for shuttle operation
- Can also be optionally configured for automated shifting operation

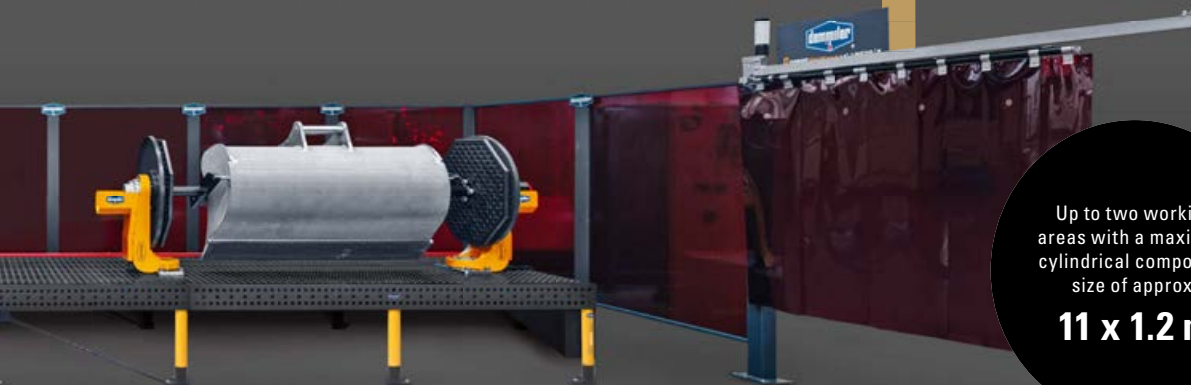


Up to two working
areas with a maximum
cylindrical component
size of approx:

3.5 x 1.5 m

DEMMELE[®] COBOT WeldSpace 4.0[®]
HOUSE

WELDING WeldSpace



Up to two working
areas with a maximum
cylindrical component
size of approx:

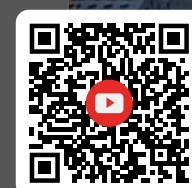
11 x 1.2 m

**HIGH
PERFOR-
MANCE
WELDING
PROCESSES**

ALUMINIUM STAINLESS STEEL STEEL

**Extensive protected
DEMMELE[®] job
library – High-per-
formance welding
jobs developed in
DEMMELE[®]'s welding
laboratory**

Over 100 protected welding jobs
with all important parameters
tailored to the material, power
source, welding process and
torch.



Experience the DEMMELE[®]
COBOT WeldSpace 4.0[®]
TABLE 24/12 in action.

MANIPULATOR ERGONOMIX M®

NEW

ERGONOMIX M® 3000

TILTING TORQUE 19.000 NM

BEARING LOAD: 3.000 KG

Unique
Swivelling
range up to
180 degrees.



Limited space. Unlimited possibilities.
Outstanding flexibility during welding or
assembly work thanks to swivel range
of up to 180° as standard.

Features of the Ergonomix M® and optimal expansion possibilities

- ① **Controller**
Series equipment
- with pendant control panel ②
- with foot switch ③
- ④ **Teach controller**
M2000: Item no. Z00-01001-024
M3000: Item no. Z00-01001-024
M4000: Item no. Z00-01001-025
- ⑤ **Area scanner**
Item no. Z00-01005-100
- ⑥ **Rotary feedthroughs**
for querying the state of fixtures,
electrical:
Item no. Z00-01004-005
for pneumatic clamping fixtures:
Item no. Z00-01004-008
for hydraulic clamping fixtures:
Item no. Z00-01004-009
- ⑦ **Ground connector**
max. 400 A at 60% ED:
Item no. Z00-01000-002
max. 700 A at 60% ED:
Item no. Z00-01000-009

Basic model Ergonomix M®

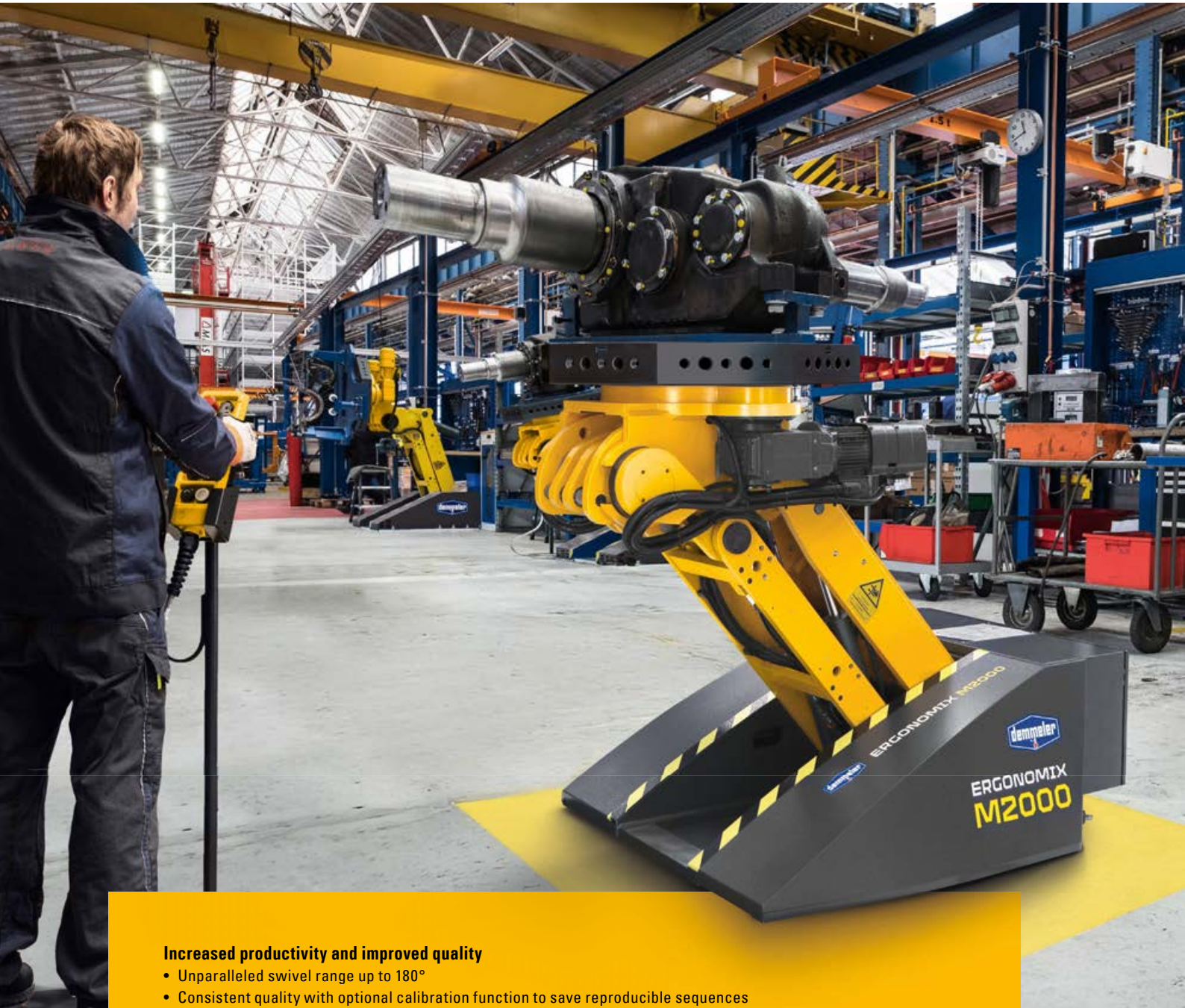
Description		NEW			
		M 2000 / V1250	M 2000 / V2500	M 3000	M 4000
Bearing load (w/o worktop)	[kg]	2000	2000	3000	4000
Max. interference area at 180° (w/o worktop)	[mm]	1000	1000	1000	1500
At Workpiece height	[mm]	650	650	650	500
Max. rotation speed	[U/min]	1,4	1,4	1,4	1,4
Min. rotation speed	[U/min]	0,75	0,2	0,2	0,2
Torque	[Nm]	1250	2500	2500	5000
Tilt angle	[°]	180	180	180	180
Moment of tilt	[Nm]	8000	8000	19000	32000
Min. height (w/o worktop)	[mm]	490	490	490	750
Max. Height at 180° swivel angle	[mm]	970	970	970	983
Max. Height at 90° swivel angle	[mm]	1480	1480	1480	1680
Pendant control panel		✓	✓	✓	✓
10-speed control		✓	✓	✓	✓
Motors / rotary axis		1	2	2	2
Item no.		M02-02000-006	M02-02000-007	M03-03000-047	M04-04000-000

Specifications without worktop. Other equipment details on request.
Errors and changes reserved. Offer is non-binding.

- Series equipment
- Special equipment

For more information about our
DEMMELER Ergonomix M®
manipulator range, please visit
www.demmeler.com





Increased productivity and improved quality

- 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

Protection of health and safety

- Ergonomic work that protects your back
- Improved workplace safety

Extensive range of equipment is available

- Various clamping and adapter plates available in different sizes and shapes

Standard control options



**Controller at
control cabinet**



**Controller with
pendant control station**



**Controller with
foot switch**

MANIPULATOR ROBOTIX WE

Mounting
on the floor of the
production facility or
on the DEMMELE
rail system

Benefits

- Ergonomic work that protects your back
- Improved workplace safety
- Ultimate productivity
- Higher melting deposition rate when welding
- No need for time-consuming reclamping – the workpiece is lifted and turned in a single clamping cycle



Easily position heavy loads up to 14,000 kg

The Robotix turning unit from DEMMELE 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 DEMMELE rail system.

Basic model of the Robotix turning unit

Description	WE 2000	WE 4000	WE 6000	WE 8000
Load capacity per column [kg]	1000	2000	3000	4000
Total load capacity [kg]	2000	4000	6000	8000
Standard height of rotation axis [mm]	540	600	600	600
Effective stroke [mm]	1700	1700	1700	1700
Turning radius [mm]	2240	2300	2300	2250
Torque [Nm]	2000	3000	6000	10000
Controller at control cabinet	✓	✓	✓	✓
Item no.	102-02000-050	104-04000-050	106-06000-050	108-08000-050
Basic model price	On request	On request	On request	On request

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	✓	✓	✓
Item no.	110-10000-050	112-12000-050	114-14000-050
Basic model price	On request	On request	On request

Specifications without worktop. Other equipment details on request.
Errors and changes reserved. Offer is non-binding.

Features of the Robotix WE and optimal expansion possibilities

① Controller at control cabinet

- Axis activation at the touch of a button
- Optional potentiometer, for setting the speed

② Area 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

For more information
about the Robotix turning
unit, please visit:
www.demmeler.com

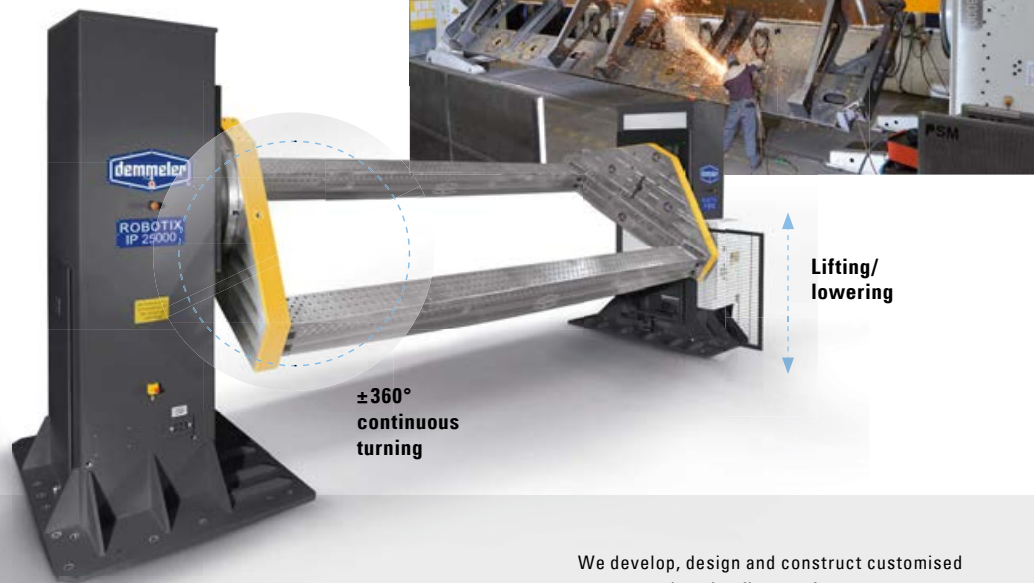




OUR PERFORMANCE
makes THE DIFFERENCE

MANIPULATOR ROBOTIX

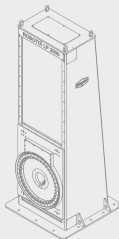
When you have
something big in
mind. Lift and turn
workpieces up to
40,000 kg.



Lifting/
lowering

± 360°
continuous
turning

We develop, design and construct customised
clamping fixtures for you on request



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		
Item no.	I20-01000-100	I40-01000-100
Basic model price	On request	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 DEMMELE rail system for each lifting column	Z10-W1000-109	Z20-W1000-109
DEMMELE 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

Specifications without worktop. Other equipment details on request.
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makes THE DIFFERENCE

OUR NEW DEMMELER BRAND AMBASSADOR



In MEISTER MEGERLE, we have found a brand ambassador who is an excellent fit for us. We look forward to exciting projects.

@MEISTERMEGERLE



MEISTER MEGERLE x DEMMELER



Convenient online ordering: in the DEMMELER webshop

Discover our entire product range for clamping systems, tools and accessories on our website and order conveniently online.



Subscribe to our new YouTube Channel that showcases many products and example applications.



Visit us at the trade fairs

Find out more about professional and automated welding production with our COBOT WeldSpace 4.0® welding cell and discover DEMMELER's wide product range. You can find our current trade fair presences online: www.demmeler.com.



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DEMMELE Maschinbau GmbH & Co. KG
Alpenstraße 10, 87751 Heimertingen/Germany
Tel.: +49 83 35 98 59-0
Fax: +49 83 35 98 59-27
Email: sales@demmeler.com
Internet: www.demmeler.com

Your authorised dealer: