

THE PROFESSIONAL
COBOT WELDING
AUTOMATION SOLUTION



OUR PERFORMANCE
makes THE DIFFERENCE

DEMMELE[®] COBOT WeldSpace 4.0[®] LINEAR F 40/15 | 80/15

Automated gas-shielded welding in shuttle operation



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DEMMELER® COBOT WeldSpace 4.0® LINEAR 40/15 | 80/15

Gamechanger for COBOT welding: Highly efficient welding of components with a length of up to 12 metres

Clamping and welding components up to a length of eight metres and more. What was previously only possible with industrial robot solutions, the new COBOT WeldSpace 4.0® LINEAR from DEMMELER does with reliable repeat accuracy and lasting precision. The result is precise weld seams and greater welding productivity. The fully equipped welding cells with welding robot and welding technology offer scope for unique modularity and flexibility with a wide range of possible configuration options.

| TECHNICAL SPECIFICATIONS | LINEAR 40/15 F | LINEAR 80/15 F |
|--|-----------------------|-----------------------|
| External dimensions of cell | 4900 x 2200 x 1975 mm | 8900 x 2200 x 2700 mm |
| Dimensions workspace | 4500 x 1200 mm | 8500 x 1200 mm |
| Weight | approx. 4110 kg | approx. 5350 kg |
| Max. load | 10000 kg | 10000kg |
| Linear axis travel Fanuc CRX welding robot | 3000 mm | 7000 mm |

Product highlights

- 1 The **Fanuc CRX collaborative welding robot** travels on a dynamic linear axis (mathematically coupled for synchronised movements with the robot – 7th axis).
- 2 In addition to the robot, the **welding power source, the wire supply, the welding fume extraction system** and the **torch cleaning station** also move.
- 3 Integrated **DEMMELE® 3D welding table D28** in the size 8400 x 1395 mm (due to the modular design, also available in other lengths of 3 m, 6 m, 9 m and 12 m on request). The entire range of DEMMELE® 3D clamping systems is available for precise clamping of the workpieces.



Maximum productivity

- 4 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.
- 5 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**.
- 6 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.



DEMMELE® single-axis manipulator with counter bearing

The manipulator's rotary axis is fully integrated into the robot controller. The manipulator and robot axes move simultaneously, which ensures greater efficiency and speed during welding.

DEMMELER® WeldSoft F 1.0

Simple programming via drag-and-drop

Whether you are an experienced programmer or a beginner – the professional welding software DEMMELER® WeldSoft F 1.0 offers numerous features for industrial welding, such as arc sensor, tactile sensor, etc. Programming and teaching of points using the Teach Pendant user interface for pass-through teaching and easy drag-and-drop programming.

Easy programming with the Tablet Teach Pendant

Clear programme management with display of various parameters

- Current runtime component
- Job runtime
- Arc time

Perfect interaction:
The control system
of the COBOTS



DEMMELER®
job library

All COBOT and welding parameters in one place

Extensive protected DEMMELER® job library – High-performance welding jobs developed in DEMMELER's welding laboratory

Registered users can use the job library of the DEMMELER® WeldSoft F 1.0 software to access over 100 protected welding jobs with all the important parameters matched to the material, power source and welding process. You can also view the videos on the welding processes via QR codes on the stored data sheets.

Type of welding seam depending on material



Fillet
weld



Overlap
weld



Corner
weld



Vertical
weld



Equipment that is perfectly tailored to your specific tasks.

Perfectly coordinated welding processes

- Welding systems designed for the COBOT WeldSpace 4.0®
- Robot welding equipment from the Fronius brand
- Extensive job libraries
- Integration and software extension of the DEMMELE WeldSpace 4.0® software
- Input of the welding jobs from the power source and simple selection using a list on the control panel



High-quality welding robots

FANUC CRX Cobot:
User-friendly collaborative robot for users with little or no robotics experience.



Intuitive programming and operating concept

Professional welding software with numerous features for industrial welding, such as arc sensor, tactile sensor, etc. Programming and teaching of points using the Teach Pendant user interface for pass-through teaching and easy drag-and-drop programming.



Maximum safety

COBOT WeldSpace 4.0® contains all safety-relevant equipment:

- Welding safety curtains for sliding and folding open
- Secured workspaces and laser scanners



Travelling high- vacuum extraction system in combination with powerful extraction welding torch

Separates more than 99.9% of the captured welding fume particles

Ultimate flexibility and efficiency

- The cell can be flexibly integrated and adapted to changing requirements
- You have access to the comprehensive selection of DEMMELE accessories to set up your clamping fixtures as well.





OUR PERFORMANCE
makes THE DIFFERENCE

HIGH PERFORMANCE+



3D CLAMPING SYSTEMS
MANIPULATORS
COBOT WELDSPACE 4.0®
NC ROTARY TABLES
TOOL ARENAS
CONTRACT MANUFACTURING



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Service expertise at DEMMELER:

Thanks to their reliable design and construction, our products require only minimal service and after-sales support. Nevertheless, a service hotline, worldwide spare parts delivery and direct on-site assembly at the customer's premises are part of our range of services.

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