



MPW CNC Multi Production Welder

Technical Data

Working range	1 250 x 1 050 mm (MPW 1010); 1 250 x 2 250 mm (MPW 2010); (maximum working range for up to 3 welding heads)
Welding range	M3 to M8, dia. 3 to 8 mm (dia. 10/12/12.7 mm only possible with modification)
Stud length	8 to 40 mm (other lengths on request)
Welding capacity	Up to 30 studs/min (depending on stud welding unit, stud type and positioning of stud)
Traverse speed	Up to 48 m/min
Stud feeding	Automatic stud feeding (up to 3 different stud length per welding head) (not included in delivery)
Positioning accuracy of welded stud	± 0.2 mm for mild steel, stainless steel and ± 0.2 mm for aluminium (depending on workpiece and stud geometry)
Positioning and repeat accuracy	± 0.05 mm
Stud welding head	KAH 412 Optional: KAH 412 LA (mechanical length compensation - gap) (not included in delivery)
Max. number of stud welding heads	4 (up to 3 stud lengths per welding head possible)
Connections	Electrical: 400 V, 32 A, 50 Hz Pneumatic: 6 bar min./10 bar max./inner hose dia. 6 mm
Motor-driven Z-axis	Z = 0 to 200 mm (free programmable because of servo drive technology)
Dimension L x W x H	2 400 x 2 700 x 3 100 mm (MPW 1010); 3 600 x 2 700 x 3 100 mm (MPW 2010)
Dimension L x W x H with machine protection cover	3 800 x 4 750 x 3 000 mm (MPW 1010)
Dimension L x W x H with protective light grid	4 000 x 3 700 x 3 100 mm (MPW 1010) 5 300 x 3 700 x 3 100 mm (MPW 2010)
Order No.	According to project

General Information

Application

- Basic milling operations (optional)
 - Milling of the welding position for removing anodising or zinc layers prior to welding
 - Removal of spatter around the welding stud with crown cutter after welding

Process variants

- **Tip ignition (CD)**
- **Drawn arc welding (ARC)**
- **Short cycle drawn arc welding (SC)**



Equipment

- Graphic user interface (Windows 7)
- Easy menu navigation
- Continuous path control
- CNC-programming according to DIN 66025
- Very high welding capacity through intelligent program architecture
- Multilingualism
- Free zero point
- Quick change system for stud welding heads
- Fast and easy programming through user guided program editor
- Industrial-PC-controlled
- Hard disc with 60 GB memory capacity
- Rewelding function and continuation of the program after stop
- Flexible connectors for ground clamps
- Very short set-up time (a.e. automatic calibration of Z-axes)
- Integrated display of cycle time and work piece counter
- Network connection

Structure

- High precision ball screw system
- High positioning accuracy of the unit through rugged design and linear guidance with ball bearings
- Clear welding cable guidance inside the energy chains
- Machine accessibility from all 4 sides through a side-mounted switchboard cabinet behind the Y working range
- Operating panel
- Detailed documentation of mechanical and electrical components

Options

- HBS-CAD with DXF-files converter and network interface card for external programming
- Flexible fixture concept
- Machine protection cover (only for MPW 1010)
- Customer specific handling systems
- Single stud feeding PBZ
- Pneumatic clamp
- Workpiece downholder
- Spray regulator unit
- Shuttle table (only for MPW 1010)
- Swivel stop
- HBS Code Reader
- HBS Dual Milling Unit
- HBS Adjustment set for welding head position

Advantages

Features

- High performance servo motors ($V_{max} = 48 \text{ m/min}$)
- Up to 8 servo axis
- Very short change-over time
- Free programmable stroke of Z-axis (0 to 200 mm)

Safety

- Safety equipment according to latest and accident prevention regulations light barrier with fence (safety class 4)

Welding

- High welding rates
- Fully automatic program sequence for welding

Suitable stud welding units

CDMi 2402, CDMi 3202, IT 1002, IT 90

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(Technical data may change)