



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 40 studs/min (depending on stud welding unit, stud type and positioning of stud)
Traverse speed	60 m/min
Stud feeding	Automatic stud feeding (up to 3 different stud length per welding head)
Positioning accuracy of welded stud	± 0.15 mm for mild steel, stainless steel and ± 0.2 mm for aluminum (depending on work piece and stud geometry)
Positioning and repeat accuracy	± 0.05 mm
Stud welding head	KAH 412, alternative KAH 412 LA
Max. number of stud welding heads	4 (up to 3 stud lengths per welding head possible)
Connections	Electrical: 400 V, 16 A (32 A), 50 Hz Pneumatic: 6 bar min./10 bar max./inner hose dia. 6 mm
Motordriven Z-axis	Z = 0 to 115 mm (free programmable because of servo drive technology)
Dimension L x W x H	2,300 x 2,350 x 2,200 mm (MPW 1010); 3,500 x 2,350 x 2,200 mm (MPW 2010)
Order No.	According to project

General Information

Application

- Basic milling operations (optional)
- Special applications like gluing, foaming etc. (on request)

Process variants

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

Equipment

- Graphic user interface (Windows XP)
- Easy menu navigation
- Continuous path control
- CNC-programming according to DIN ISO 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

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
- Movable operating panel on rollers
- Wiring of machine and switchboard according to latest VDE regulation
- Detailed documentation of mechanical and electrical components

Options

- HBS-CAD with DXF-files converter and network interface card for external programming
- Modem for remote maintenance
- Flexible fixture concept
- Machine protection cover
- Customer specific handling systems
- Single stud feeding PBZ
- Pneumatic clamp
- Work piece down holder
- Spray regulator unit
- Turn table
- ARC welding with 400 V mains

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 stud welding head (0 to 115 mm, optional up 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

CDM 2401 (AT), CDM 3201 (AT), ARC 800, IT 1002, IT 50, IT 90, SCD 3201

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(Technical data may change)