



MPW
CNC Multi Production Welder

Technical Data	
Working range	49.21" x 41.34" (1,250 x 1,050 mm) MPW 1010; 49.21" x 88.58" (1,250 x 2,250 mm) MPW 2010 (maximum working range for up to 3 welding heads)
Welding range	#4 to 5/16", dia. #4 to 5/16" (M3 to M8, dia. 3 to 8 mm); dia. 3/8" to 1/2" (dia. 10 to 12.7 mm) only possible with modification
Stud length	0.31" to 1.57" (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	196.85'/min (60 m/min)
Stud feeding	Automatic stud feeding (up to 3 different stud length per welding head)
Positioning accuracy of welded stud	± 0.0059" (± 0.15 mm) for steel and ± 0.008" (± 0.2 mm) for aluminum (depending on work piece and stud geometry)
Positioning and repeat accuracy	± 0.002" (± 0.05 mm)
Stud welding head	KAH 412
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. 1/4" (dia. 6 mm)
Motordriven Z-axis	Z = 0 to 4.53" (0 to 115 mm) free programmable because of servo drive technology
Dimension L x W x H	90.55" x 92.52" x 86.61" (2,300 x 2,350 x 2,200 mm) MPW 1010; 137.80" x 92.52" x 86.61" (3,500 x 2,350 x 2,200 mm) MPW 2010
Order No.	According to project

General Information

- Application**
- Stud welding
 - Simple milling (optional)

- Process variants**
- **Tip ignition**
 - **Drawn arc welding**
 - **Short cycle drawn arc welding**

- Equipment**
- Graphic user interface (Windows XP)
 - Easy menu navigation



- Continuous path control
- CNC-programming according to DIN ISO 66025
- Optimized stud feeding (background feeding)
- Multilingualism
- Free zero point
- Quick change system for stud welding heads
- Fast and easy programming
- Industrial-PC-controlled
- Hard disc with 60 GB memory capacity
- Reweld function
- Flexible connectors for ground clamps
- Automatic calibration of Z axes

Structure

- 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

Options

- Network interface card
- Modem for remote maintenance
- Flexible fixture concept
- Machine protection cover
- Safety housing for the machine
- Customer specific handling systems
- Single stud feeding PBZ
- Pneumatic clamp

Advantages

Features

- Servo drive ($V_{max} = 40\text{m/min}$)
- Ball screw system
- Up to 8 servo axis
- Very short change-over time

Safety

- Safety equipment according to customer requirement (Light barrier with fence or housing with protective door)

Welding

- Free programmable stroke of stud welding head (0 to 115 mm, optional up to 200 mm)
- High welding rates
- Fully automatic program sequence for welding

Suitable stud welding units

CDM 1601 (AT), CDM 2401 (AT), CDM 3201 (AT), ARC 500, ARC 800, IT 1001, SCD 3201

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(Technical data may change)