

## CNC MOD 500x300

### CNC stud welding machine for fully automatic stud welding

- very good price/performance ratio
- cost-effective operation already with small and medium quantities
- for precise and reliable stud welds
- excellent quality and performance features
- high cycle time
- modular concept - enables customer-oriented solutions
- standard working area: 500x300 mm, customizable (X: 300-800 mm, Y: 200-600 mm)

#### Application

- threaded studs, studs and tapped studs  $\varnothing$  2-10 mm, length: 6-40 mm (other diameters and lengths as well as special welding elements on inquiry)
- welding methods: capacitor discharge (contact and gap method) (optional: short cycle, drawn arc)

#### Standard equipment

- stud welding unit LBS 90 (optional: other stud welding units, depending on application)
- automatic welding head KHA-200F (optional: automatic welding head KKA-200F)
- stud feeding system VBZ



## Description

- fully automatic operation of welding programmes
- fully automatic stud feeding
- simple operation of the control unit and the machine
- quick and simple programming
  1. on an user interface directly at the machine
  2. on a PC in an excel sheet (transfer of the generated files by USB interface)  
(precognition about programming languages not necessary)
- quick and simple installation and retooling
- manual and automatic operation
- selectable parking position
- selectable zero points/zero adjustment
- 500 welding positions programmable (number of programmes user-defined)
- reweld function
- monitoring of stud transport (aut. programm stop, if stud is not fed; aut. reloading, if stud is missing),
- monitoring of welding current (aut. programm stop, if stud is not welded)
- monitoring of charging voltage
- robust and compact construction made from aluminium profiles
- insulated desk top made from aluminium with T-slots
- drive by high-precision ball screw actuators
- quick-change system for changing welding heads quickly
- multi-language ability
- external main switch and external emergency stop switch
- electromagnetic compatibility (EMC) tested, CE conformity

## Options

- housing according to EU directive on machinery 98/37/EG (sliding door at loading area), underframe
- second and third welding head
- pneumatic workpiece clamps with integrated mass transmission (can be positioned freely)
- drive by servo motors
- motor driven Z-axis (for different welding levels or stud lengths)
- single stud feeding by manual throw-in
- fluid spraying device

## Technical Data

	<b>CNC MOD 500x300</b>
<b>Working area</b>	X-axis: 500 mm, Y-axis: 300 mm
<b>Clamping area T-slot plate</b>	810x360 mm
<b>Clearance between clamping area and X-/Y-axis</b>	200 mm
<b>Equipment X-/Y-axis</b>	ball screw, drive by step motor (optional: drive by servo motor), ball track
<b>Traverse path</b>	X: 500 mm, Y: 300 mm, Z: height adjustment 60 mm by precision hand crank, pneumatic working slide 80 mm
<b>Welding rate</b>	up to 40 studs/minute (depending on configuration and use)
<b>Positioning accuracy welded studs</b>	± 0,15 mm (steel, stainless steel) ± 0,2 mm (aluminium)
<b>Positioning/repeating accuracy machine</b>	± 0,05 mm
<b>Traverse path speed</b>	X: $V_{max} = 0,15$ m/s, Y: $V_{max} = 0,15$ m/s (optional: X: $V_{max} = 0,25$ m/s, Y: $V_{max} = 0,25$ m/s; with servo motors (optional): X: $V_{max} = 0,5$ m/s, Y: $V_{max} = 0,5$ m/s)
<b>Dimensions (WxHxL)</b>	1200x1500x1000 mm