Product information
Capacitor discharge stud welding

KTS-1050 CNC Stud Welding System

- Safety tested
- Production controlled



KTS-1050 CNC stud welding system without casing



KTS-1050 CNC SOYER stud welding system complete with casing

Description:

The KTS-1050 CNC stud welding system is a high-quality new development that fully complies with the EU Machinery Directive 98/37/EC. It incorporates a solid design with long-term quality and precision. The particularly favourable price/efficiency ratio enables profitable operation even with low and medium-scale manufacture.
(For innovative special features, please see over).

Technical data:

Clamping surface T-slot board:	1 540 mm x 1 000 mm
Working area X-axis:	800 mm without casing (750 mm including casing)
Working area Y-axis:	1030 mm
Load capacity of table:	100 kg
Headroom between T-slot board and X-axis:	200 mm
Appurtenances X-axis:	Ball screw (pitch 20 mm) and servomotor drive module in closed loop 32 Ncm, linear guidance system with recirculating ball bearings (type SHS-25C)
Appurtenances Y-axis:	Ball screw (pitch 20 mm) and servomotor drive module in closed loop 60 Ncm, linear guidance system with recirculating ball bearings (type SHS-25C)
Travel:	X = 800 mm, Y = 1050 mm, height adjustment via precision crank handle slide 150 mm, pneumatic welding stroke 120 mm
Operating accuracy:	+/- 0.15 mm
Repeating accuracy:	+/- 0.05 mm
Positioning speed:	max. 24 m/min
Dimensions:	1 480 mm x 2 050 mm x 1 975 mm (w x h x d, without control system)

Technical specifications are subject to change without notice

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Innovative Special Features of the KTS-1050 CNC Welding System

The KTS-1050 CNC three-axis stud welding system with outstanding quality and performance features opens new dimensions in the field of stud welding technology. The X and Y motional axes are driven by high-quality, precise and backlash-free recirculating ballscrews. The linear rail guides have a very high load capacity in all directions, are of a rigid, compact design and are free from backlash. The Z-axis is equipped with a pneumatic slide and a precision crank handle slide. A motor-driven Z-axis is optionally available. This machine enables fully automatic welding of studs and pins from 3 - 10 mm in diameter and up to 40 mm in length in accordance with all known stud welding systems. Special studs are available on request.

Development and production fulfil all prescribed safety targets such as
- the latest safety and accident prevention regulations (Act on the Safety of Technical Working Equipment)
- European regulations (EU Directive on Machinery)
- electromagnetic compatibility (EMC Act)
- GS mark and CE mark for verified safety provided the machine is supplied with the optional full casing in accordance with EU Directive on Machinery 98/37/EC being installed in factory.

Standard equipment:

- 1 BMS-10N energy source (other stud welders such as BMS-10P, BMK-10LC etc. are optionally available)
- 1 SK-5AN welding head (SK-5AP optionally available)
- 1 UVR-300 universal feeder for standard studs with flange

Option: Possibility of mounting two welding heads or machining centres (milling heads, drilling heads etc.)

A well-thought-out concept enables a simple operation of the control and machine. Previous knowledge of program languages is not necessary.

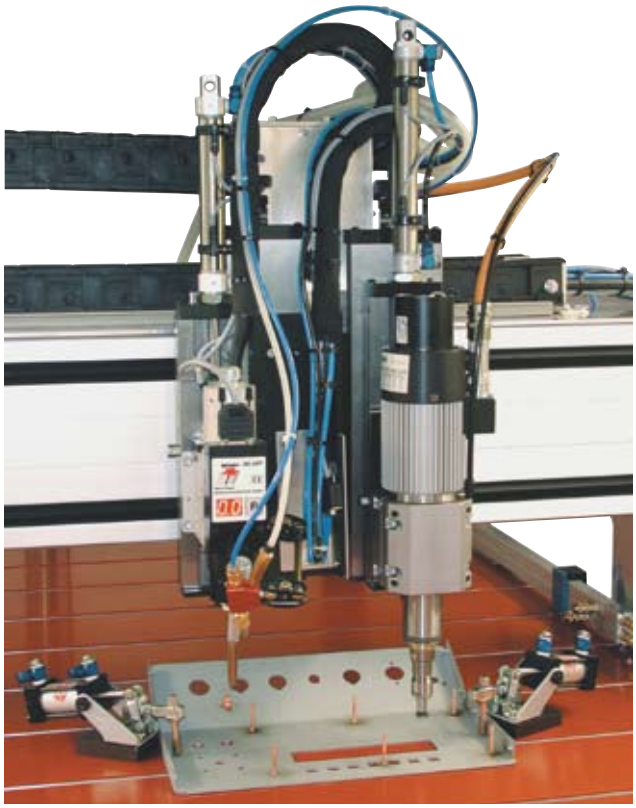
MA-400-S CNC control with graphical programming system:

- Industrial PC with at least 512 MB RAM, 80 GB hard disc, DVD burner, 256 MB graphics card, 2.5 GHZ
- Intel compatible processor, membrane keyboard with IP67 touch pad, 17" TFT display

Performance characteristics:

- Programming according to DIN 66025
- Manual and automatic operation
- Manual entry of the positions
- Selectable park position
- Free selectable change position (welding head change)
- Real time simulation with graphical display
- Cycle times changeable during program flow
- Positioning speed selectable during program flow
- Zero point correction for each welding head
- Automatic follow-up impulse in case of missing studs
- Shiftable graphic and numeric position display
- Remote maintenance and remote diagnosis via ISDN/modem (option)
- Web cam for optical remote diagnosis via ISDN/modem (option)
- Programming in a matter of seconds through importing DXF files

Besides the KTS-1050 CNC, the following CNC stud welding systems with different travels or several welding heads are available: **KTS-550 CNC, KTS-850 CNC, KTS-1550 CNC, KTS-2550 CNC**



The picture above shows the SK-5AP welding head in combination with a milling/drilling head. The SK-5AP welding head is equipped with a digital display to ensure precise measurement of the lift and immersion depth.

SOYER top-of-the-range products awarded the following prizes for


Production


Quality


Technology



Design


Stud Manufacture



Quality Management



International Approval



Safety


EC Conformity