



BMS-10P Stud Welder



The BMS-10 P stud welder serves as an energy source for safely and reproducibly welding different welding elements on metallic workpieces.



BMS-10 P SOYER stud welder with quality assurance

Description:

The BMS-10P SOYER stud welder with integrated quality control monitoring process for capacitor discharge stud welding increases productivity and product quality and lowers costs. It is particularly suitable for stationary application and represents the fundamental prerequisite for the process capability of standard series

Technical data:

Welding range:

M3 - M10 or Ø 3 - 10 mm with steel and stainless steel,
M3 - M8 or Ø 3 - 8 mm with aluminium and brass

Welding process:

Capacitor discharge process (TS) as per EN ISO 14555 with gap and contact welding

Power source:

Capacitor battery

Charging capacity:

88 000 µF (option: 132 000 µF for M10 steel studs)

Charging voltage:

50 - 200 V, infinitely variable

Welding time:

0.001 - 0.003 seconds

Welding sequence:

up to 30 studs/min, depending on stud diameter

Mains supply:

230 V~, - 50 Hz, 10 A / 115 V~, - 60 Hz, 16 A (internally adjustable)

Welding cable:

3 m highly flexible

Earth cable:

2 x 3 m highly flexible

Dimensions:

430 x 220 x 560 mm (w x h x d)

Weight:

26 kg

Colour:

RAL 5009 azure-blue

Subject to technical changes

Innovative Special Features of the BMS-10P Stud Welder

The new BMS-10P SOYER stud welder with integrated process monitoring and quality control is the new international yardstick for quality assurance in capacitor discharge stud welding. With easy operation, the stud welder offers a maximum of technical performance advantages for producing stud welded joints of high quality.

Additional performance features of the BMS-10P stud welder include:

- ▶ 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)
 - electromagnetic compatibility (EMC Act)
 - European regulations (EU Directives on Machinery)
- ▶ GS/CE/S emblem for verified safety
- ▶ 100 % monitoring and quality proof by measuring and evaluating all important parameters without using destructive testing methods
- ▶ Display of important measurable variables such as arc voltage, arc current and arc duration as well as gun/head running time on LCD display for recognizing principal faults in stud welded joints (stud alignment, pores, cracks, lack of fusion, incomplete welding joints and blow effect)
- ▶ Monitoring of welding studs regarding surface contamination and perfect condition of the ignition tip geometry
- ▶ Monitoring of workpiece regarding surface coating or contamination
- ▶ Monitoring of peripheral conditions and disturbances such as poor earth transmission, hollow position or rebound of sheet metal parts, stud holder wear, parting of cables, insufficient plug connections and similar
- ▶ Operation via processor-controlled conversational electronics with LCD display and multilingual operator guidance
- ▶ Individual and easy programmability for special welding tasks. Once optimized results can be stored and recalled time and again
- ▶ Function tests without welding current for mechanically motional sequences of welding guns and welding heads
- ▶ Display of all important functions by means of pilot lamps. Error messages are shown on the display in plain text
- ▶ Constant monitoring and display of charging voltage. No negative impairment in case of mains voltage fluctuations
- ▶ Automatic module for semi- and fully automatic stud feed
- ▶ CNC interface for signal interchange with external controls
- ▶ Self-protecting device in case of excess temperature
- ▶ Reproducibility of the stud welded joint in accordance with DIN ISO 9001
- ▶ Quality control monitoring process with print-out for documentation and filing purposes via printer (optional equipment)
- ▶ Software for evaluation of welding results on request

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



Production



Quality



Technology



Design



Quality Management



International Approval



Safety



EC Conformity