



SK-5AP Automatic Welding Head



The SK-5AP automatic welding head with support legs and support tube enables the support of the welding head and the fixing of the workpiece. Studs and pins can be rapidly welded onto metallic workpieces.



SK-5AP SOYER automatic welding head for capacitor discharge stud welding

Description:

The new "intelligent" SK-5AP automatic welding head with microprocessor can for the first time precisely measure the lift and plunging distances via a patented digital display (Pat. No. 589 05 207). By recording the measured value for the plunging depth of each welded stud, a decisive step has been made in the direction of quality assurance and process capability under the standards series DIN EN ISO 9000 ff. In connection with the semi- and fully automatic stud feed system which is also patented (Pat. No. 0406459), this trend-setting new development is especially suitable for the production of high-quality stud welded joints. The SK-5AP automatic welding head is particularly designed for connection to stationary machining centres, conventional or CNC stud welding machines, robots and handling systems etc. (For innovative special features, please see over).

Technical data:

Welding range:	Studs and pins from 3 - 8 mm in diameter and 6 - 40 mm in length (standard)
Material:	Steel, stainless steel, aluminium and brass
Mains supply:	Shock-proof socket 230 V~, 50/60 Hz for power unit of digital display
Compressed-air supply:	5 - 7 bar
Type of cooling:	Automatic air cooling of stud holder on stud transport with simultaneous cleaning
Dimensions:	75 x 300 x 125 mm (w x h x d)
Weight:	2 kg (4.5 kg with slide)
Convertibility:	from gap to contact welding (option)

Subject to technical changes

Innovative Special Features of the SK-5AP Automatic Welding Head

The new SK-5AP SOYER automatic welding head with semi- or fully automatic stud feed is an innovative top-line product with electronic and mechanical precision and long-term quality. Its compact, small-sized and slim design makes the automatic SK-5AP welding head exceptionally suitable for stud welding works in complicated, tight and difficult-to-access locations as well as for welding operations directly on high edges of workpieces.

Additional performance features of the SK-5AP automatic welding head include:

- ▶ Development and production are in compliance with 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)
- ▶ Uniformly high welding quality by guaranteeing the reproducibility of stud welded joints in meeting the process capability under standards series DIN EN ISO 9000 ff
- ▶ Universally applicable for all known capacitor discharge, drawn arc and short-cycle drawn arc stud welding processes
- ▶ Quick-change system for conversion to other stud diameters
- ▶ Simple and reasonably-priced conversion system for oversized studs up to 12 mm in diameter (optional equipment)
- ▶ Possible jams caused by defective studs can be recognized visually and eliminated immediately owing to the free accessibility of the welding head
- ▶ Plug-in connections for easy maintenance and quick assembly
- ▶ Test switch for the simulation of welding sequences with function control and lift setting
- ▶ Conversion possibility from gap to contact welding (option)
- ▶ Retrofitting possibility for stand device with support tube for supporting the welding head and simultaneous fixing of the workpiece as a protection against bounce and concave positioning (optional equipment)
- ▶ Fine hand adjustment of lift in defined steps of 0.1 mm by means of a special notched turning knob at the end of the welding head. The lift setting is digitally shown on the display
- ▶ Extremely precise stud positioning accuracy owing to motional sequences which are free from backlash
- ▶ Long service life and long-term quality owing to wear-free guide bush with ball bearing and special surface-treated, ground guide piston with air cylinder

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



Production



Quality



Technology



Design



Quality Management



International Approval



Safety



EC Conformity