

Product information
Capacitor discharge and
short-cycle drawn arc stud welding



SK-1A Automatic Welding Head



The SK-1A automatic welding head allows welding elements to be welded on metallic workpieces at lightning speed.



SK-1A SOYER automatic welding head for capacitor discharge and short-cycle drawn arc welding

Description:

The compact and sturdy SK-1A welding head with smallest possible dimensions allows studs to be fed semi- and fully automatically. It has been especially designed for use in narrow locations and areas of difficult access or on complicated workpieces. The SK-1A miniature welding head is ideal for problem-free connection to stationary machining centres, 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 - 35 mm in length

Material:

Steel, stainless steel, aluminium and brass

Welding process:

Capacitor discharge gap welding and short-cycle drawn arc stud welding

Welding sequence:

up to a maximum of 30 studs/min, depending on dimensions

Dimensions:

75 x 180 x 170 mm (w x h x d, height includes stud holder)

Weight:

1.5 kg (without slide)

Subject to technical changes

Innovative Special Features of the SK-1A Automatic Welding Head

The new SK-1A SOYER automatic welding head with smallest possible dimensions is suitable for applications where other automatic welding heads cannot be used due to spatial requirements. Its slim, short and very low design enables it to be used in tight and difficult-to-access locations for the production of high-quality stud welded joints. Its low weight enables it also to be connected to small, lightweight robots and low-power support systems.

Additional performance features of the SK-1A 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)
- ▶ Universally applicable for all known capacitor discharge, drawn arc and short-cycle drawn arc stud welding processes
- ▶ Quick conversion to other stud dimensions
- ▶ Plug-in supply connections for easy maintenance and quick assembly
- ▶ Test switch for the simulation of welding sequences with function control and lift setting
- ▶ 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
- ▶ Optimally designed cover as a protection against welding spatters, dirt and other contamination

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



Production



Quality



Technology



Design



Quality Management



International Approval



Safety



EC Conformity