



## BMK-16i Stud Welder



The PH-2L is the standard gun for the BMK-16i stud welder.



### BMK-16i Inverter SOYER stud welder for universal application

#### Description:

The new BMK-16i stud welder is a multifunctional High-Tech development perfectly suitable for stud welding, electrode welding and TIG welding. The lightweight stud welder in compact design features high technical performance due to an extremely steady arc. The adjustability of all important welding parameters and easy operation via membrane keyboard with display allow optimum technical comfort and first-rate welding results. (For innovative special features, please see over).

#### Technical data:

##### Welding range:

M3 - M16 RD or 2 - 13 mm in diameter

##### Material:

Steel, stainless steel, heat-resistant steel  
(aluminium and brass conditionally, depending on the respective requirements)

##### Standard gun:

PH-2L positioning welding gun

##### Welding current:

300 - 1000 A, adjustable and regulated with stud welding  
40 - 300 A, adjustable with electrode welding  
40 - 100 A with TIG welding

##### Welding time:

10 - 1000 ms with stud welding

##### Welding sequence:

up to 50 studs/min, depending on stud diameter

##### Mains supply:

3 x 400 V - 50/60 Hz - 32 AT, other voltage on request

##### Dimensions:

335 x 440 x 700 mm (w x h x d)

##### Weight:

36.5 kg

##### Colour:

RAL 5009 azure-blue  
Subject to technical changes

# Innovative Special Features of the BMK-16i Stud Welder

The new BMK-16i SOYER stud welder with outstanding quality and performance features represents the future state of stud welding technology. The all-digital stud welder with computer intelligence guarantees absolutely uniform and reproducible functional sequences for optimum welding results. The modular construction in useful and easy-to-service compact housing, the modern design and progressive technology provide the SOYER stud welder with its unique appearance. The BMK-16i stud welder is universally applicable and combines in a compact case the following stud welding methods

- Drawn arc stud welding
- Stud welding with protective gas
- Short-cycle drawn arc stud welding

and welding systems

- Stud welding
- Electrode welding
- TIG welding

Additional performance features of the BMK-16i 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)
- ▶ Certificate proof of mentioned safety targets
- ▶ Extremely simple operator guidance via sophisticated membrane keyboard with clear symbols for all necessary parameter inputs
- ▶ CE/S emblem for verified safety
- ▶ Welding current variably adjustable
- ▶ Shielding gas preflow time variably adjustable
- ▶ Welding time and preweld current time variably adjustable
- ▶ High-dynamic regulation of the welding process
- ▶ High clock frequency of 30 kHz
- ▶ Integrated protective gas operating facilities
- ▶ Low connected load and low weight
- ▶ High welding current of 1000 A for stud welding
- ▶ High welding current of 300 A for electrode welding and 100 A for TIG welding
- ▶ Constant current controller (current fluctuation control)
- ▶ Interface for signal interchange with external controls (optional simple and low-cost retrofitting possibility with an automatic module for semi- and fully automatic stud feed)
- ▶ LED display panel with control function of all operational states
- ▶ Self-protecting device in case of excess temperature or excessive welding sequence
- ▶ Computer check on operability and simulated program run of all setting parameters on stud welder and gun without welding current
- ▶ New abrasionproof, scratch-resistant and antisoiling plastic film coating on the front panel to protect all inscriptions even after many years of use
- ▶ Table at the front panel showing standard values for all common stud types and diameters
- ▶ Table at the front panel indicating standard values for electrode welding and TIG welding
- ▶ Operating range with short-cycle drawn arc welding: M3 - M10 or 2 - 10 mm in diameter
- ▶ Operating range with drawn arc welding: M3 - M16 RD or 2 - 13 mm in diameter
- ▶ Operating range with shielding gas operation: M3 - M12 or 2 - 11 mm in diameter

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



Production



Quality



Technology



Design



Quality Management



International Approval



Safety



EC Conformity