

AS

SCHÖLER + BOLTE



STUD WELDING TECHNOLOGY BY



SCHÖLER + BOLTE

# PRO-I

INVERTER STUD WELDING UNITS FOR DRAWN ARC AND SHORT CYCLE STUD WELDING

MODERN INVERTER TECHNOLOGY FOR EXCELLENT WELDING QUALITY





EASY OPERATION ALSO IN CASES OF PROBLEMATIC POWER SUPPLY THROUGH INTEGRATED ELECTRONIC WIDE-RANGE POWER SUPPLY UNIT (SUPPLY AREA: 320-495 V)

59 USER-SPECIFIC WELDING PROGRAMMES STORABLE

INTEGRATED WELDING PARAMETER MONITORING (OPTIONAL: WELDING PARAMETER MEMORY)

FAST WELDING SEQUENCES THROUGH INNOVATIVE COOLING CONCEPT

STANDARD WELDING PROGRAMMES PRE-INSTALLED (USER-SPECIFIC ADAPTABLE)

POWERFUL!  
HIGH WELDING CURRENT FOR MAXIMUM WELDING DIAMETERS

HIGH EFFICIENCY!  
LOW POWER CONSUMPTION!

CONTROLLING AND MONITORING OF ALL FUNCTIONS AND PARAMETERS BY FAST AND HIGH-PERFORMANCE MICROPROCESSOR

OPTIONAL (ALSO RETROFITABLE): SHIELDING GAS MODULE AND/OR AUTOMATIC MODULE FOR EACH GUN CONNECTION

WELD COUNTER FOR EACH GUN CONNECTION

MULTI GUN UNITS  
OPTIONAL  
FOR PRO-I 2200 AND PRO-I 2800  
(ALSO RETROFITABLE):  
TWO OR FOUR GUN  
CONNECTIONS

DIFFERENT ADJUSTMENT  
VALUES FOR WELDING  
CURRENT AND TIME FOR  
EACH GUN CONNECTION

AUTOMATIC DETECTION  
OF USED GUN



MODERN INVERTER TECHNOLOGY ENSURES VERY PRECISE CONTROL AND HIGH REPRODUCIBILITY OF THE WELDING PROCESS

VERY HIGH ARC STABILITY! ALSO IN CASES OF SHORT WELDING TIMES AND LOW WELDING CURRENTS

CONSTANT CURRENT REGULATION

IDEALLY SUITED FOR MOBILE USE - CONSIDERABLY LOWER WEIGHT THAN CONVENTIONAL STUD WELDING UNITS

PROTECTION OF THE ELECTRONICS THROUGH AIR FILTER

EASY OPERATION BY ROBUST ROTATING PRESSURE SWITCH

WELDING CURRENT AND TIME CONTINUOUSLY ADJUSTABLE

ALL FUNCTIONS AND PARAMETERS ARE SHOWN ON A BIG DISPLAY

ROBUST CONSTRUCTION FOR THE USE IN HARSH ENVIRONMENTS

# PowerPackage

possible combinations on the inside

ACTIVE AND INTELLIGENT SYSTEM FOR THE CONNECTION OF TWO (OPTIONAL: THREE) WELDING UNITS PRO-I TO A POWERFUL UNIT

INTEGRATED AS STANDARD IN THE MODELS PRO-I 1300 AND PRO-I 2200

ANY JOB-RELATED CONFIGURATION AT ANY TIME (ALSO E.G. BY USE OF RENTAL UNITS)

WELDINGS WITH HIGH CURRENTS OF UP TO 3150 A WITH ONLY INDIVIDUALLY FUSED 32 A CONNECTIONS (PRO-I 1300)

EASY TRANSPORT AND SUBSEQUENT CONNECTION OF THE LIGHT PRO-I 1300 UNITS IN AREAS DIFFICULT TO ACCESS



## HIGHLIGHTS AND SPECIAL EQUIPMENT

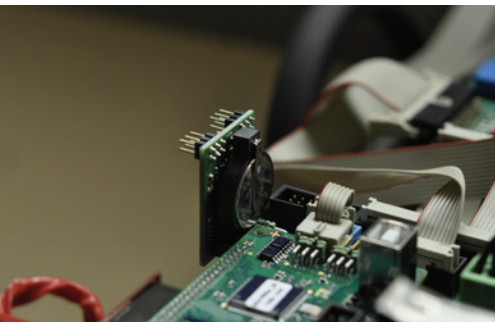


### WELDING PARAMETER MONITORING AND DOCUMENTATION

The welding parameter monitoring, integrated as standard in all series PRO-I stud welding units, enables a quality control of the finished welds.

Features:

- » recording of welding current, welding time and arc voltage for each weld
- » recording of stud travel (lift, piston runtime and immersion depth) for each weld (only when a welding gun resp. an automatic welding head with travel measuring system is used)
- » comparison of the recorded welding parameters (actual values) to the parameters of a reference weld (set values) (tolerances adjustable)
- » in case of variances to the reference weld a warning is displayed or the unit is locked for further welds until the release by the operator (functionality can be switched off)
- » storage of the last ten welding parameter sets
- » optional (also retrofitable): welding parameter memory for the storage of 24500 welding parameter sets (storage with date and time) with USB-interface for data transmission (welding parameter sets) to a PC



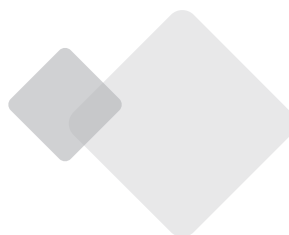
### AUTOMATIC STUD FEEDING

- » An automatic module enables the connection of the automatic stud feeder VBZ and an automatic welding gun.
- » For multi gun units each gun connection can be equipped with an automatic module.



### ADAPTER BOX PRO-SPLIT

- » available as accessory for all series PRO-I units
- » enables the operation of up to four stud welding guns with different adjustment values for welding current and time on one unit
- » automatic detection of used gun
- » weld counter for each gun connection
- » with up to four shielding gas modules





## SHIELDING GAS MODULE FOR STUD WELDING WITH SHIELDING GAS

- » optionally available for all series PRO-I units
- » enables stud welding with shielding gas for weld pool backing
- » shielding gas pre- and post-flow time continuously adjustable
- » For multi gun units each gun connection can be equipped with a shielding gas module.



## TROLLEY DESIGN

- » optional for PRO-I 2200/2800 (also retrofitable): design as trolley for mobile use on construction sites
- » two big, extremely robust castors
- » pull-out telescopic handle



## POSSIBLE COMBINATIONS POWER PACKAGE

PRO-I 1300 + PRO-I 1300:	max. welding current/time: 2100 A/1500 mS ⇒ max. welding diameter 22 mm
PRO-I 1300 + PRO-I 1300 + PRO-I 1300:	max. welding current/time: 3150 A/1500 mS ⇒ max. welding diameter 25 mm
PRO-I 1300 + PRO-I 2200:	max. welding current/time: 3150 A/1500 mS ⇒ max. welding diameter 25 mm
PRO-I 2200 + PRO-I 1300:	max. welding current/time: 3150 A/1500 mS ⇒ max. welding diameter 25 mm

## TECHNICAL DATA AND CHARACTERISTICS

	PRO-I 1300	PRO-I 2200	PRO-I 2800
<b>Welding method</b>			
Drawn arc (ceramic ferrule) [suitable for weld through deck]	x	x [x]	x [x]
Short cycle	x	x	x
Drawn arc (shielding gas)	o	o	o
<b>Max. welding diameter (mm)</b>			
Drawn arc (ceramic ferrule)	13	22	25
Short cycle	10	10	10
Drawn arc (shielding gas)	12	12	12
<b>Welding current (A)</b>	100-1050	100-2100	100-3150
<b>Welding time (mS)</b>	5-1000	5-1500	5-1500
<b>Constant current regulation</b>	x	x	x
<b>Welding parameter monitoring</b>			
Welding parameter monitoring	x	x	x
Welding parameter memory with USB-interface for data transmission to a PC	o	o	o
<b>Gun connections</b>			
1 gun connection	x	x	x
2 gun connections		o	o
4 gun connections		o	o
<b>Utilisable with adapter box PRO-SPLIT</b>	x	x	x
<b>Operation</b>			
Microprocessor control	x	x	x
Welding programme storage	x	x	x
Device lock with PIN code	x	x	x
Weld counter (resettable)	x	x	x
Lift test	x	x	x
Repeat cycle lock	x	x	x
Electronic function control	x	x	x
Self diagnosis system	x	x	x
Automatic function test	x	x	x
<b>Shielding gas module</b>	o	o	o
<b>Automatic stud feeding</b>	o	o	o
<b>Error diagnosis systems</b>			
Excess temperature	x	x	x
Phase failure	x	x	x
Damage on welding/control cable	x	x	x
Damage on solenoid	x	x	x



	PRO-I 1300	PRO-I 2200	PRO-I 2800
<b>Interfaces</b>			
CAN-BUS	o	o	o
Anybus	o	o	o
USB	o	o	o
<b>Thermic controlled ventilator</b>	x	x	x
<b>Trolley design</b> with two big, extremely robust castors and pull-out telescopic handle		o	o
<b>Lifting eyes</b>		x	x
<b>2 swivel castors, 2 fixed castors</b>		x	x
<b>Robust, powder-coated metal housing</b>	x	x	x
<b>Dimensions</b>			
Width (mm)	290	550	550
Height (mm)	360	850	850
Length (mm)	650	650	650
Weight (kg)	31	81	102
<b>Electric connection</b>			
Mains supply (V) at 50/60 Hz	320-495	320-495	320-495
Mains fuse external	35 AT	63 AT	125 AT
Mains plug CEE	32 A	63 A	125 A
Protection	IP 23	IP 23	IP 23
<b>Control cable socket for welding guns</b>	12-pin	12-pin	12-pin
<b>Suitable welding guns</b>			
PHM-10	x	o	o
PHM-12	x	o	o
PHM-160	o	o	o
PHM-161	o	o	o
GD 16	x	o	o
GD 19	o	x	x
GD 22	o	x	x
GD 25	o	o	x
PHA-500	o	o	o
PHA-500-6	o	o	o

x – Standard, o – Option



## AS SCHÖLER + BOLTE GMBH

Flurstraße 25  
D-58285 Gevelsberg  
Tel.: +49 (0)2332 55106-0  
Fax: +49 (0)2332 55106-11

Ohmstraße 3  
D-85221 Dachau  
Tel.: +49 (0)8131 5159-0  
Fax: +49 (0)8131 5159-11

E-Mail: [info@as-schoeler-bolte.com](mailto:info@as-schoeler-bolte.com)



[as-schoeler-bolte.com](http://as-schoeler-bolte.com)