

# PRO-D

STUD WELDING UNITS FOR DRAWN ARC AND SHORT CYCLE STUD WELDING

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

59 USER-SPECIFIC  
WELDING PROGRAMMES  
STORABLE

INTEGRATED WELDING  
PARAMETER MONITORING  
(OPTIONAL: WELDING  
PARAMETER MEMORY)

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

EASY OPERATION BY ROBUST  
ROTATING PRESSURE SWITCH

WELDING CURRENT  
AND TIME  
CONTINUOUSLY  
ADJUSTABLE

PRO-D 1600

ALL FUNCTIONS  
AND PARAMETERS  
ARE SHOWN ON  
A BIG DISPLAY

CONSTANT CURRENT  
REGULATION

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

WELD COUNTER FOR EACH  
GUN CONNECTION

MULTI GUN UNITS  
OPTIONAL FOR PRO-D 1600/2200/2800  
(ALSO RETROFITTABLE):  
TWO OR FOUR GUN  
CONNECTIONS

AUTOMATIC DETECTION  
OF USED GUN

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

# HIGHLIGHTS AND SPECIAL EQUIPMENT



## WELDING PARAMETER MONITORING AND DOCUMENTATION

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

### Features:

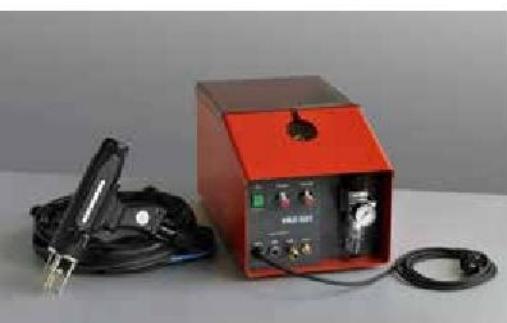
- » recording of welding current, welding time and arc voltage for each weld
- » recording of stud travel (lift, piston runtime and immersion depth) for each weld (only when a welding gun resp. an automatic welding head with travel measuring system is used)
- » comparison of the recorded welding parameters (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 retrofittable): 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-D 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-D 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.



# TECHNICAL DATA AND CHARACTERISTICS

	PRO-D 1600 basic	PRO-D 1600	PRO-D 2200 basic	PRO-D 2200	PRO-D 2800 basic	PRO-D 2800
<b>Welding method</b>						
Drawn arc (ceramic ferrule) [suitable for weld through deck]	x	x	x [x]	x [x]	x [x]	x [x]
Short cycle	x	x	x	x	x	x
Drawn arc (shielding gas)	o	o	o	o	o	o
<b>Max. welding diameter (mm)</b>						
Drawn arc (ceramic ferrule)	16	16	22	22	25	25
Short cycle	10	10	10	10	10	10
Drawn arc (shielding gas)	12	12	12	12	12	12
<b>Welding current (A)</b>	200-1400	200-1400	200-2100	200-2100	200-2600	200-2600
<b>Welding time (mS)</b>	10-3000	10-3000	10-3000	10-3000	10-3000	10-3000
<b>Constant current regulation</b>	x	x	x	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	x	x	x
2 gun connections		o		o		o
4 gun connections		o		o		o
<b>Utilisable with adapter box PRO-SPLIT</b>		x		x		x
<b>Operation</b>						
Microprocessor control	x	x	x	x	x	x
Welding programme storage		x		x		x
Device lock with PIN code		x		x		x
Weld counter (resettable)	o	x	o	x	o	x
Lift test	x	x	x	x	x	x
Repeat cycle lock	x	x	x	x	x	x
Electronic function control	x	x	x	x	x	x
Self diagnosis system	x	x	x	x	x	x
Automatic function test	x	x	x	x	x	x
<b>Shielding gas module</b>	o	o	o	o	o	o
<b>Automatic stud feeding</b>		o		o		o
<b>Error diagnosis systems</b>						
Excess temperature	x	x	x	x	x	x
Phase failure	x	x	x	x	x	x



	PRO-D 1600 basic	PRO-D 1600	PRO-D 2200 basic	PRO-D 2200	PRO-D 2800 basic	PRO-D 2800
Damage on welding/control cable	x	x	x	x	x	x
Damage on solenoid	x	x	x	x	x	x
<b>Interfaces</b>						
CAN-BUS		o		o		o
USB		o		o		o
<b>Lifting eyes</b>	x	x	x	x	x	x
<b>2 swivel castors, 2 fixed castors</b>	x	x	x	x	x	x
<b>Robust, powder-coated metal housing</b>	x	x	x	x	x	x
<b>Dimensions</b>						
Width (mm)	555	555	555	555	610	610
Height (mm)	680	680	680	680	680	680
Length (mm)	790	790	790	790	900	900
Weight (kg)	169	169	245	245	316	316
<b>Electric connection</b>						
Mains supply (V) at 50/60 Hz	230/ 400/ 415/ 460	230/ 400/ 415/ 460	230/ 400/ 415/460	230/ 400/ 415/ 460	230/ 400/ 415/ 460	230/ 400/ 415/ 460
Mains fuse external	35 AT	35 AT	63 AT	63 AT	125 AT	125 AT
Mains plug CEE	32 A	32 A	63 A	63 A	125 A	125 A
Protection	IP 23	IP 23	IP 23	IP 23	IP 23	IP 23
<b>Control cable socket for welding guns</b>	12-pin	12-pin	12-pin	12-pin	12-pin	12-pin
<b>Suitable welding guns</b>						
PHM-10	o	o	o	o	o	o
PHM-12	o	o	o	o	o	o
PHM-160	o	o	o	o	o	o
PHM-161	x	x	o	o	o	o
GD 16	x	x	o	o	o	o
GD 19	o	o	o	o	o	o
GD 22	o	o	x	x	o	o
GD 25	o	o	o	o	x	x
PHA-500		o		o		o
PHA-500-6		o		o		o

x – Standard, o – Option



**A.T.S. s.r.l.**

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