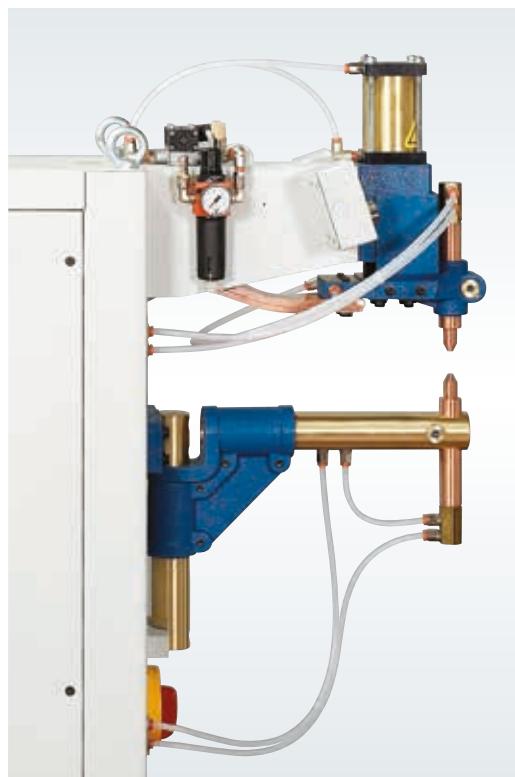
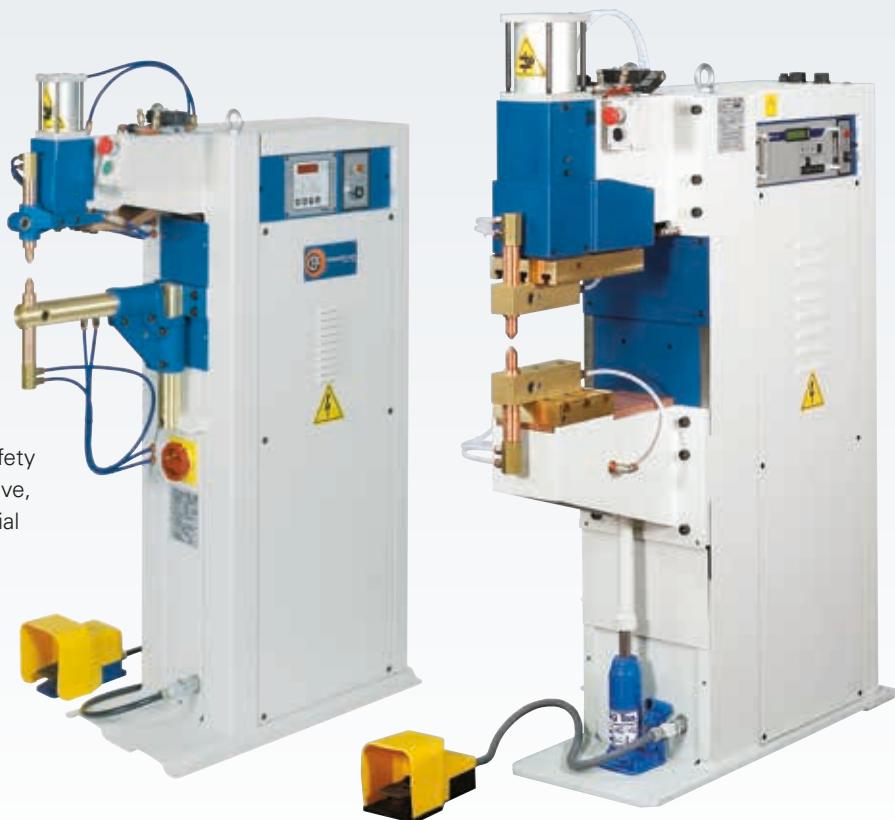




## VERTICAL STROKE SPOT AND PROJECTION WELDERS

Suitable for both spot and projection welding, PPN models fully satisfy a wide range of the heaviest large production industrial applications.

Equipped with microprocessor control, safety concomitant side buttons and solenoid valve, upon request they can be fitted with special controls to suit any special configurations.

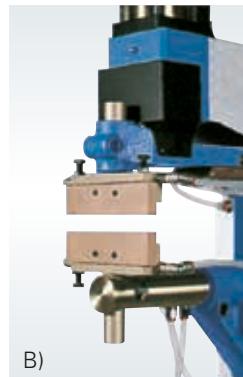


- ▶ Excellent welding on all weldable metals
- ▶ Synchronous ignition SCR group with phase shift welding current adjustment to eliminate switching transistors
- ▶ Thermostatic protection on the SCR group
- ▶ High welding currents with low consumption
- ▶ Set up time reduction thanks to quick and easy modification of electrodeholders platens opening without any intervention on the secondary circuit (patent pending)
- ▶ Self-lubricated pneumatic components to eliminate oil deposits and to safeguard the environment from contaminants
- ▶ Water cooled secondary circuit, i.e. electrodes, electrodeholders, platens and transformer, to avoid any overheating
- ▶ Water cooled copper electrodeholders with adjustable height
- ▶ Electrode force adjustable by pressure reducer group equipped with a manometer and filter for automatic air impurity expulsion
- ▶ Upper electrode movement by self-lubricated double effect pneumatic cylinder fitted with speed regulator, end stroke shock-absorber and silencer for compressed air discharge
- ▶ Solenoid valve to control welding cylinder
- ▶ Safety cycle start by means of the concomitant side buttons or, as alternative only if the operator can work in safe conditions, by electric pedal. Either option can be chosen by a selector with removable key
- ▶ Cycle stop emergency button.

## PPN 28 - 53

### ARE EQUIPPED WITH:

- ▶ Lower round arm with adjustable height and lateral adjustment
- ▶ Electrodeholders with electrodes for spot welding and ability to easily fit barholders for projection welding
- ▶ Lower arm holder can be adjusted for use with larger arm gap
- ▶ Spot welding
- ▶ Projection welding with bars for mesh



### UPON REQUEST

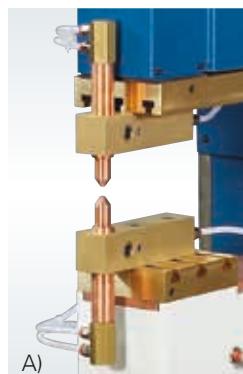
### ALSO AVAILABLE WITH:

- ▶ Different length arms (Optional)
- ▶ Lower arms with pressed-in electrode (for welding pipes or similar) and longer electrodeholder on the upper arm (Optional)
- ▶ Special version with platens only for projection welding (PPN 53)

## PPN 83 - 103 - 153 - 253

PPN 83, 103, 153 and 253, are all supplied with lower platen adjustable in height and fitted with T-slots, enabling the quick assembly of barholders, electrodeholders or any dedicated tooling for a specific application. Platens gap is easily and quickly adjustable without any intervention on the secondary circuit (patent pending).

- ▶ Manual valve for upper head descent without pressure for cleaning, centering and ordinary maintenance of the electrodes
- ▶ Upper head low friction driving system for precision welding (except PPN 83).

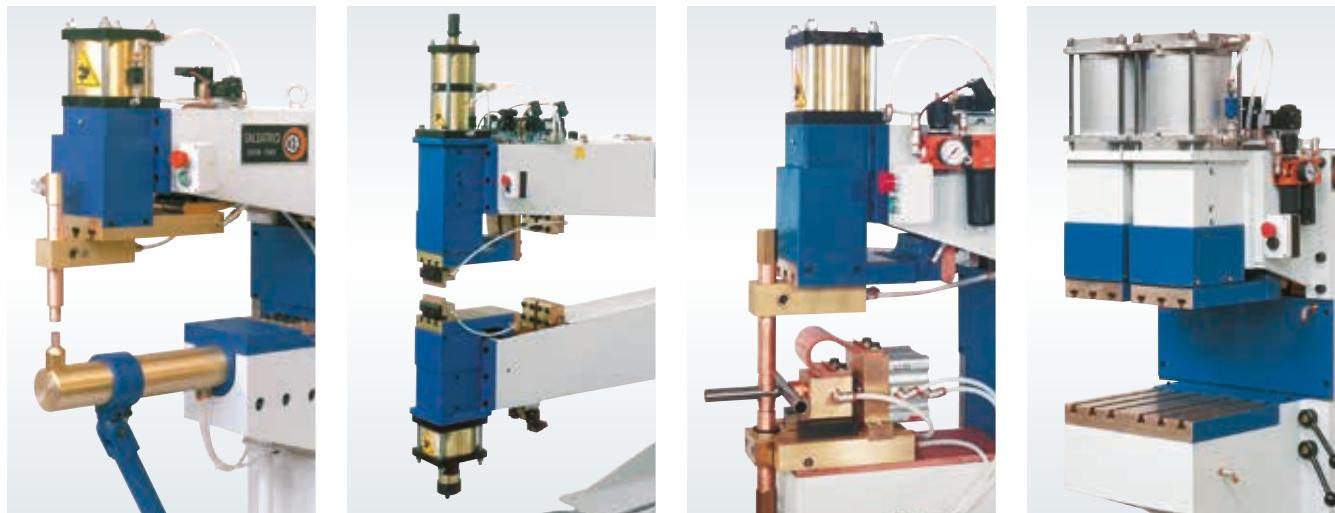


A) Spot welding

B) Barholders welding for mesh

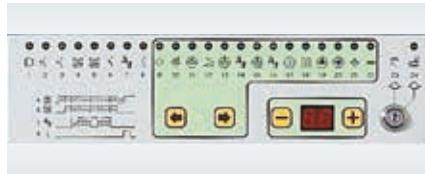
C) Projection welding

## SPECIAL VERSIONS



## ELECTRONIC CONTROLS

**DIGIT 8**



- Single or multi spot
- Two 24 V DC solenoid valves
- 50/60 Hz frequency
- Mains voltage compensation
- Weld/no weld switch

**WS 708**

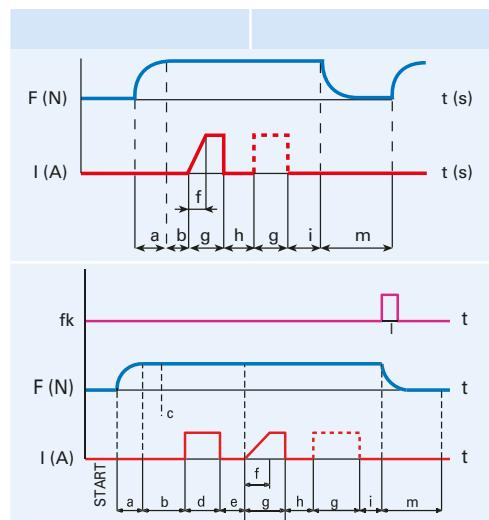


- 8 programs
- Half period welding time
- Pre-heating current
- Two 24 V DC solenoid valves
- 50/60 Hz frequency
- Mains voltage compensation
- Error message
- Weld/no weld switch
- Single or multi spot

**MPS 300 R1**



- Constant current facility
- Limit current monitoring
- 8 programs
- Half period welding time
- Spot counter
- Pre-heating current
- Two 24 V DC solenoid valves
- 50/60 Hz frequency
- Mains voltage compensation
- Error message
- Weld/no weld switch
- Single or multi spot



### FUNCTIONS

- a Pre-squeeze time
- b Squeeze time
- c Pressure contact
- d Preheating time
- e Cooling time
- f Slope up
- g Welding time
- Welding current
- h Pulse interval time
- i Holding time
- l Cycle end contact
- m Pause time

**DIGIT 8**

**WS 708**

**MPS 300 R1**

	<b>DIGIT 8</b>	<b>WS 708</b>	<b>MPS 300 R1</b>
a	•	•	•
b	•	•	•
c	•	•	•
d	---	•	•
e	---	•	•
f	•	•	•
g	•	•	•
Welding current	•	•	•
h	•	•	•
i	•	•	•
l	•	•	•
m	•	•	•



PPN 28 - 53		PPN		28	53	83	103	153	253
A		mm	395	435	400	400	400	400	445
A (Optional)	MIN.	mm	650	650	650	650	650	650	650
	MAX.	mm	---	750	---	---	---	---	---
B		mm	---	---	445	445	445	490	
C	MIN.	mm	140	180	145	145	145	200	
	MAX.	mm	400	510	300	300	300	330	
D	MIN.		690	615	800	800	800	865	
	MAX.		950	945	955	955	955	995	
		Ø mm	50	60	---	---	---	---	---
PPN 83 - 103 - 153 - 253			Ø mm	30	35	30	35	35	35
			Ø mm	19*	19*	19*	25*	25*	25*
			E mm	---	---	150	180	180	200
			F mm	---	---	150	180	180	200
			G mm	---	---	63	63	63	63
			T	---	---	2	3	3	3

TECHNICAL DATA		PPN					
		28	53	83	103	153	253
Single phase input 50/60 Hz	V	400	400	400	400	400	400
Rated power at 50%	kVA	25	50	80	100	150	250
Short circuit power	kVA	86	142	266	366	575	763
Max. welding power	kVA	69	113	210	293	460	610
Installed power	kVA	20	38	65	78	120	195
Cross section connecting cables	mm <sup>2</sup>	25	35	50	50	95	120
Delayed Fuse	A	63	100	150	200	300	500
Open Circuit Voltage	V	4,5	5,9	8,3	9,4	11,5	12,5
Short circuit current	KA	19	24	32	39	50	61
Max. welding current	kA	15,2	19	25	31,2	40	49
Thermal secondary current at 100%	kA	3,9	6	6,8	7,5	10,1	14,2
Work stroke	mm	60	65	100	100	100	100
Electrode force max 600 kPa (6 bar)	daN	230	470	736	900	1200	1884
Water consumption a 300 kPa (3 bar)	l/min	6	7	8	8	8	8
Dimensions	↗ mm	1005	1070	1115	1115	1170	1210
	→ mm	410	430	400	400	400	460
	↑ mm	1425	1520	1650	1650	1800	1800
Weight	kg	200	335	560	580	610	900

Other voltages available on request

These power sources are built for industrial environment use. EMC (CISPR 11): class A

