



MAESTRO 1200 (I)



The world Class Inverter based Submerged Arc Welder

SALIENT FEATURES

- Inverter based digitally controlled Welding head and Power source.
- High efficiency and high power factor resulting in substantial energy saving over conventional SAW outfits
- Enhanced Reliability due to SMD technology.
- Power source is CC-CV type and capable for MMA/GOUGING and SAW processes.
- *****SAW Welding can be done in either CV or CC modes. In the Constant Current mode of SAW welding, advanced Adaptive control technology is utilized to obtain the most stable arc parameters, highest level of penetration, and excellent weld bead finish*****
- The complete system consists of inverter based power source; tractor / boom mounted welding head and interconnecting cables. SAW flux is used for shielding weld metal against external atmosphere.
- Inverter based power source is energy efficient giving almost 30% energy saving over conventional type of machines.
- User can save and recall up to ten programs.
- Better user interface having 128 X 64 character LCD display for selecting various modes and button, LED and indicator lamp, which helps in easy operation of the equipment.
- Automatically selects the MMA or SAW mode based on welding head connections to power source.

FRONT PANEL FUNCTIONS

- Mains On 'Green' Colour Led Indication
- Operation Mode Indications (MMA / Gouging, Saw, Remote)
- Trip 'Red' Colour Led Indication of machine is Under Protection Mode.
- 4 digit digital displays for Voltage and Current.
- Current adjustment Encoder .



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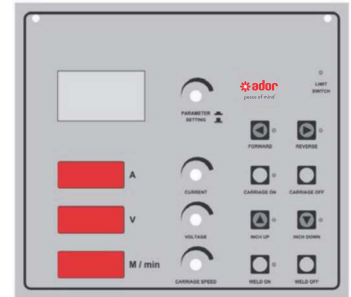


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WELDING HEAD CONTROL PANEL :

The Welding Head Control panel consists of four encoders for selecting welding parameters selection, welding current selection, welding voltage selection and carriage speed selection respectively.

- 1) Welding parameters can be seen on 128*64 character LCD as
 - MATERIAL: MS/SS
 - DIAMETER: 2-5mm
 - WIRESPEED: 0-4 M/MIN
 - UP TIME: 01-10 sec
 - SAVE: 01-10
 - RECALL: 01-10



- 2) Proper parameters can be selected by rotating the respective encoders.
- 3) A facility has been given for saving the welding parameters settings in at most 10 memory locations. So the same settings can again be recalled even after turning On the machine, by rotating RECALL option.
- 4) Another special feature of UP TIME is given to the user in between 1 second to 10 second, so that after welding is OFF, wire won't stick in to the weld pool. In this case wire feeder motor will rotate in opposite direction to pull out the wire for the specified seconds.
- 5) The Front panel consists of seven tact switches, for selecting various functions such as carriage movement direction (FORWARD / REVERSE) selection, carriage motor ON / OFF command, wire inch UP / DOWN switch and welding ON / OFF switch.
- 6) CC-CV Mode Selection switch for SAW is provided on panel to suit specific SAW Welding requirements

TECHNICAL SPECIFICATIONS WELDING HEAD (WH 15 I)

Input	Unit	Value
Input Supply:		
Voltage	Volt	42 V (From Power Source)
Output		
Welding Current Range	Amps	100-1200
Duty Cycle 100% Continues	Amps	1000
Welding Voltage Range	Volts, DC	26-44
Welding Carriage Speed	M/Min	0.1-1.6
Wire Feed Speed	M/Min	0-4
General		
Range Of Adjustment Vertical	mm	140
Transverse To Head Travel - Horizontal		140
Parallel To Head Travel - Horizontal		140
Max Swivel :		
Transverse To Hand Travel	Degree	45°

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Parallel To Head Travel	Degree	30°
Horizontal Open Swing		270°
Standard Bored Spool	mm	285-315 (Adjustable)
Welding Flux-Hooper Capacity	Kg./Ltr.	10/7
Wire Spool Weight	Kg	25
Suitable Welding wire Diameter	mm	2.0,2.5,3.15,4.0,5.0
Dimension (L x W x H)	mm	1500 x 1030 x 580
Total Weight Without Flux & Wire	Kg.	95

TECHNICAL SPECIFICATIONS - POWER SOURCE



Parameter	Unit	Value
Input		
Supply Voltage, Phase Frequency :	Volts AC	415 V +15% -10%, 1 Phase, 50/60 Hz
Input Power @ 415 VAC @ 100% duty cycle	KVA	55
Input Power @ 415 VAC @ 60% duty cycle		66
Input Supply Current @ 415 VAC @ 100% duty cycle (1000)	Amps DC	76
Input Supply Current @ 415 VAC @ 60% duty cycle (1200)		92
Efficiency	%	≥ 85
Power Factor		Upto 0.93
Output		
Open Circuit Voltage @415 V Input Supply	Volts DC	90 V
Welding Current Range (CC-GOUGING Mode)	Amps	100-1200
Welding Voltage Range (CC-SAW Mode)		26-44
Welding Current (40°C) @ 100% duty cycle	Amps DC	1000
Welding Current (40°C) @ 60% duty cycle (10 min DC)		1200
Welding Electrode Sizes (Dia.) In MMA Application	mm	3.2,4,5,6.3 mm
Welding Electrode Sizes (Dia.) In GOUGING Application		Upto 12 mm
SAW Welding Wire Size (Dia.)	mm	2.5,3.2,4,5 mm
Remote Controller Optional (Can be Used In MMA/GOUGING Process only)	10 Meter	Provide as Optional for Remote Current Detting
General		
Front Panel Functions		Mains On 'Green' Coloir Indication
		Operation Mode Indications (MMA/GOUGING, SAW, REMOTE)
		Trip 'Red' Colour LED for indication Machine is Under Protection Mode
		4 Digit Display for Voltage & Current Current Adjustment Encoder

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Protections	-	Over Voltage, Under Voltage, Single Phasing, Over Temperature Over Temperature Protection
Cooling	Type	Forced Air
Class Of Insulation	-	H
Degree Of Protection	-	IP23
Dimensions L x W x H (Without handle)	mm	930 x 525 x 950
Weight (Approx)	Kg	115

- **Warranty:** One year from the date of commissioning. ADOR WELDING LIMITED warrants that all new equipment sold from Plant/Area Offices / Authorised Distributors are free from defects in materials and workmanship and will perform in full accordance with applicable specifications.
- In view of continuous development, ADOR WELDING LIMITED reserves the right to modify/change the design and/or the specifications without any prior notice.
- Backed by dedicated customer care package.