

CHAMP MULTI 400

CHAMP MULTI 400 (SSPW)

The new world class inverter based,
indigenous multi-process welding outfits



- Inverter based digitally controlled synergic GMAW, self shielded FCAW and MMA welding outfits
- High efficiency and high power factor – resulting energy saving upto 30%
- Light weight compact MIG/MAG/FCAW welding outfits
- Enhanced Reliability due to SMD technology
- Auto “Weld Stop” when welding torch is taken away from weld job.
- Compatible for automation
- Champ Multi 400 (SSPW) specially proven for root pass/hot pass and filling/capping of cross country pipeline welding applications



WELDERS TO THE NATION SINCE 1951
ADOR WELDING LIMITED

(Formerly Known as Advani-Oerlikon Ltd.)
www.adorwelding.com



CHAMP MULTI 400 CHAMP MULTI 400 (SSPW) The new world class inverter based Multi process welding outfit

INTRODUCTION

CHAMP MULTI 400 welding outfits are IGBT inverter based welding power source with Synergic operation, suitable for GMAW, self shielded FCAW and MMA welding applications. The IGBT Power module, ferrite core and fast recovery diode are used as key devices for power conversion and transmission to assure better efficiency and performance. It is most suitable for manual and semi automatic self shielded flux cored arc welding for Pipe welding application, as well as for multi process activity like GMAW and SMAW

The complete system consists of power source, wire feeder, torch and interconnecting cables. By selecting the MMA or MIG or FCAW mode through Digital panel, SMAW or GMAW or Semi Automatic self shielded FCAW process can be selected.

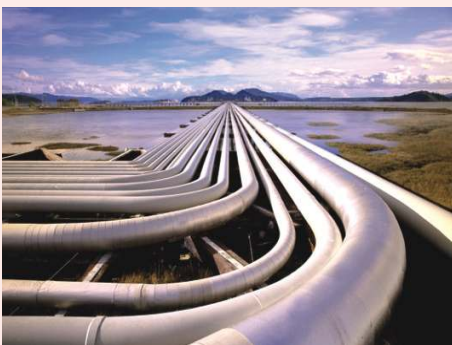
Various combinations of complete system (outfits) are given in the Ordering Information

SALIENT FEATURES

- Digital Panel for adjusting the welding parameters and selection of Process either SMAW, Lift Arc TIG, MIG or Semi automatic self shielded FCAW.
- Synergic mode of operation for single point control in MIG mode.
- 30% more Energy efficient than conventional machines.
- Maximum Power factor upto 0.90
- Excellent dynamic response enables superior arc characteristics.
- 2T, 4T and SPOT and Multi Spot operating modes
- Electronic choke adjustment and Arcforce adjustment for better arc control



- Crater voltage and Crater current adjustment through digital panel.
- Unique feature of Fresh Tip transfer (FTT) to avoid globule formation.
- Gas preflow, post flow and Burn back time presetable
- Welding program for 10 Jobs, can be stored in manual mode of MIG process.
- Automatic "Weld Stop" facility.
- Suitable for TIG operation by interfacing separate HF unit in TIG mode.



APPLICATIONS

- Heavy duty Fabrication and structural welding
- Champ Multi 400 (SSPW) proven with cellulosic (6010, 7010G, 8010G) and other special electrodes self shielded flux cored wires such as AWS 5.29, ASME SFA 5.29, E71T8K2 and E81T8G for manual welding (root pass, hot pass) and semiautomatic welding processes of cross country pipeline welding applications.



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PROTECTION

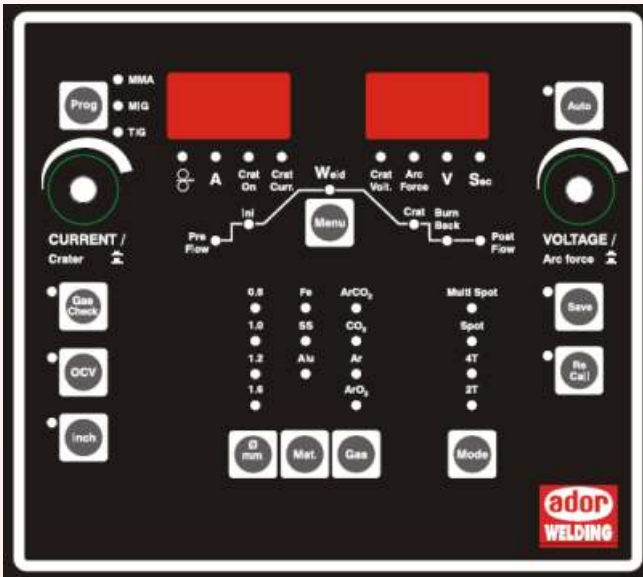
The equipment is provided with following protections.

- Under Voltage and Over Voltage:** If supply voltage goes lower or higher than set limit, RED colour Trip LED will glow on the front panel.
- Over Temperature:** If the temperature of the main power elements is more than safety limits, RED colour Trip LED will glow on the front panel.
- Single Phasing Protection:** If any one of the three phases (R, Y, and B) is absent, welding will stop. Welding current would not be available in this condition, RED colour Trip LED will glow on the front panel.

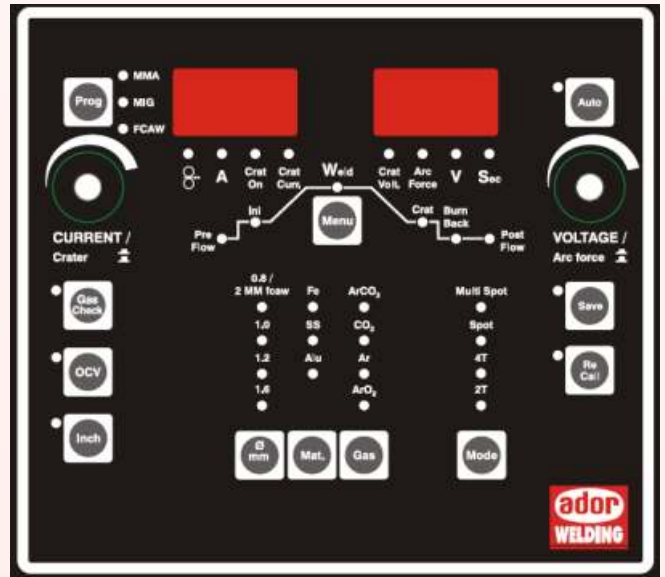
CHAMP MULTI 400 / CHAMP MULTI 400 (SSPW)

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WIRE FEEDER SPECIFICATIONS:

TECHNICAL SPECIFICATIONS	UNIT	FEEDLITE 20 (FEM/NEM)	FEEDLITE 40 (FEM/NEM)	WF-40 MULTI (I)
Suitable for wire sizes	mm	0.8,1,1.2,1.6	0.8,1,1.2,1.6	2.0 mm Flux cored wire
Wirefeed speed	mtr/min	1.5 to 18	1.5 to 18	1.0 to 6.0
Wire roll drive	Nos	Two	Four	Four
Wire feeder Motor type	Type	PMDC	PMDC	PMDC
Wire feeder Motor Voltage	Volts	42	42	42
Suitable for Wire Spool capacity	Kgs	15	15	15
Dimensions:				
Length	mm	450	450	520
Width	mm	170	170	240
Height	mm	275	275	360
Weight (without spool)	Kgs	8	8	20

TORCH SPECIFICATIONS:

TECHNICAL SPECIFICATIONS	UNIT	ADOR-TW 400 (E)	SUPER SSPW-350
Current Rating	Amps	400A @ 60% Duty cycle 310 A @ 100% Duty cycle	350A @ 60% Duty Cycle
End Connection to Torch	Type	Euro	Lincoln End Connection
Suitable for Wire Ø	mm	0.8, 1.0, 1.2, 1.6	1.2 to 2.4 mm Self Shielded Flux cored wires
Torch Length	mtr	3	3 / 4.5



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CHAMP MULTI 400 CHAMP MULTI 400 (SSPW)

CC/CV

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SPECIFICATIONS

TECHNICAL SPECIFICATIONS	UNIT	ICCCVR 400
INPUT		
Input Supply:		
Voltage	Volt	415 V +10 %, -10 %
Phase	No	3 Ø
Frequency	Hz	50 / 60
Input KVA @ 100% duty cycle	KVA	13 (FCAW/ MIG Mode - 13.64) 14 (MMA Mode - 15.4)
OUTPUT		
Open Circuit Voltage	Volts+/-5%	55 V for FCAW/MIG/TIG Mode / 75 V for MMA Mode
Welding Current Range	Amp	40-400 FCAW (MIG) Mode / 10-400 TIG Mode / 50-400 MMA Mode
Welding Current (40°C 10 minute cycle) @ 60% duty cycle	Amp	400
@ 100% duty cycle	Amp	310
Welding Voltage Range	Volt	14-41 FCAW (MIG) Mode / 14.9 to 36.7 v (actual)
Crater Current Range	Amp	40-400 Semi Auto FCAW/MIG Mode
Crater Voltage Range	Volt	14-41 Semi Auto FCAW/MIG Mode
Mode of operation	Type	2 track, 4 track, spot timer (1-30 Sec.), Multi Spot, Gas check, OCV check facility
Remote Control	Type	With Digital display for setting voltage & current
Power Factor	Cos (Ø)	upto 0.90
Efficiency	%	>82
GENERAL		
Compatibility to International standard		As per IEC 60974-1
Wire feed speed	m/min	1-6 in case with WF MULTI 40 (I) wirefeeder 1.5-18 in case with Litefeed 200/400 wirefeeder
Suitable welding wire dia	mm	Aluminum 1.2 – 1.6 Steel 0.8, 1.0, 1.2 & 1.6 2.0 , 2.4 for Self shielded Flux core wire
Synergic Mode	Type	Single point control in short circuit arc in MIG Mode
Program Storage Facility	Nos	10 jobs along with parameter locking facility in MIG in manual mode
Interfacing (Optional)		Through RS232 / RS485
Ingress Protection	Class	IP23
Cooling	Type	Forced Air
Mounting		CHAMP MULTI 400: on Wheels
Dimensions (approx.)		CHAMP MULTI 400 (SSPW): On Skid
Length	mm	730
Width	mm	480
Height	mm	730
Weight (Approx.)	Kg	67
Audio Noise Emission	dB	70

ORDERING INFORMATION:

WELDING OUTFIT	POWER SOURCE	WIREFEEDER	TORCH	PRODUCT CODE
Champ Multi 400 (A)	ICCCVR - 400	FEEDLITE - 20 (FEM)	ADOR-TW 400 (E)	F10.37.401.0042
Champ Multi 400 (B)	ICCCVR - 400	FEEDLITE - 40 (FEM)	ADOR-TW 400 (E)	F10.37.401.0052
Champ Multi 400 (C)	ICCCVR - 400	FEEDLITE - 40 (FEM)	MTG-400 (E)	F10.37.401.0066
Champ Multi 400 (D)	ICCCVR - 400	FEEDLITE - 40 (NEM)	ADOR-TW 400 (E)	F10.37.401.0089
Champ Multi 400 (SSPW)	ICCCVR - 400 (SSPW)	WF-40 MULTI (I)	SUPER SSPW-350	F10.37.401.0044

- **Warranty:** One year from the date of purchase. 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.



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