



CC

Inverter

DC
+ -

DIGITAL
888

PULSED



TIG INVERTER WELDING EQUIPMENT

Based on the very latest IGBT inverter technology, TIG power sources with high frequency arc striking of the MATRIX series are equipped with an innovative digital panel for the complete control of all the welding parameters.

The excellent technical characteristics of these welding machines, coupled with the high technology of their digital control, allow high quality TIG welding, suitable for the toughest industrial applications and maintenance.

These highly advanced technology power sources are robust and user friendly: MATRIX HF's, DC output only, enable TIG welding of mild and stainless steel, copper and its alloys.

MATRIX series power sources also offer excellent performance in MMA welding with the most difficult basic and cellulosic electrodes.



coldTACK

Innovative spot welding device to achieve precise and safe joining with a minimal thermal input.

“Multi-coldTACK” function grants cold spotting in a rapid sequence, thus further widening the benefits of the single spot.

Thanks to “Perfect-Point” function, coldTACK allows to obtain the most precise spot positioning.



FEATURES

- Standard equipped with pulse mode integrated into the control with available “Easy Pulse” facility
- Excellent TIG welding characteristics
- High frequency Arc Striking, precise and efficient even from long distance
- “Energy Saving” function to operate the power source cooling fan and the torch water cooling only when necessary
- Low energy consumption
- Electromagnetic disturbance reduction because of high frequency used at arc striking only
- Use of special TIG torches will enable the remote control of the welding parameters directly from the torch
- Overheating thermostatic protection
- Metallic main structure with shock-proof fibre compound front panel
- Control panel protected against accidental impact
- Robust handle integrated into the chassis
- Sloping front panel easy to read and adjust and highly visible from any direction
- Reduced weight and size, easy-to-carry
- IP 23 protection class and dust proof electronic components, thanks to the innovative “tunnel” fan cooling system, allow their use in the toughest environments



MATRIX 4200 HF

- Digital adjustment of all the welding parameters
- Digital Ammeter and Voltmeter with welding current presetting and Hold Function of the last read value
- Digital display for the presetting of the welding parameters
- Full monitoring of the welding parameters
- Welding process selector switch: TIG DC • TIG DC “Lift” • MMA
- Welding mode selector switch: 2T/ 4T • Spot Timer Welding mode “cycle”
- Personalised welding program storing and recalling
- 4 Pulse mode TIG:
 - SYN: automatic pulse parameters setting in function of chosen peak current
 - FAST: up to 500 Hz in TIG DC
 - ULTRA FAST: up to 2000 Hz in TIG DC with contained deformation on very thin sheet.
 - SLOW: to have both peak and base current time adjustments

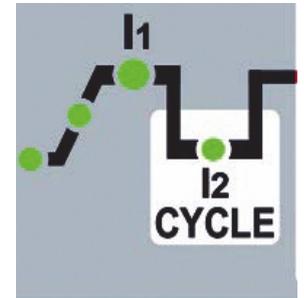
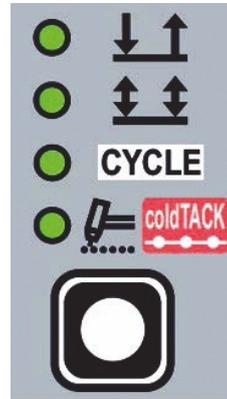
FUNCTION	MATRIX 4200 HF	
	(TIG)	(MMA)
High Frequency striking	•	
“Lift” mode striking	•	
Pre Gas	•	
Initial Current	•	
Up Slope	•	
Welding current	•	
2 nd welding current	“CYCLE”	•
Base current	“PULSE”	•
Base current time	“PULSE”	•
Peak current	“PULSE”	•
Peak current time	“PULSE”	•
Pulse frequency	“PULSE”	•
Down Slope	•	
Final current	•	
Post gas	•	
Spot time	•	
Hot Start		•
Arc Force		•
Electrode type selection		

MMA FUNCTIONS

- Adjustable Arc Force for choosing the best welding arc dynamics
- Adjustable Hot Start to improve the arc striking with difficult electrodes
- Electrode Antisticking function

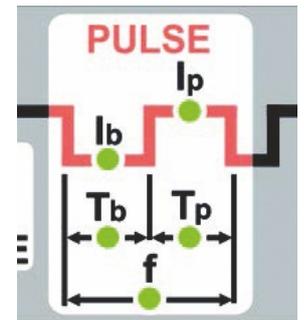
“CYCLE” FUNCTION

“CYCLE” function allows, by simply pressing the torch trigger, to continuously switch between two current values, previously preselected. This function is most suitable for welding different thickness profiles, requiring a continuous current adjustment change.



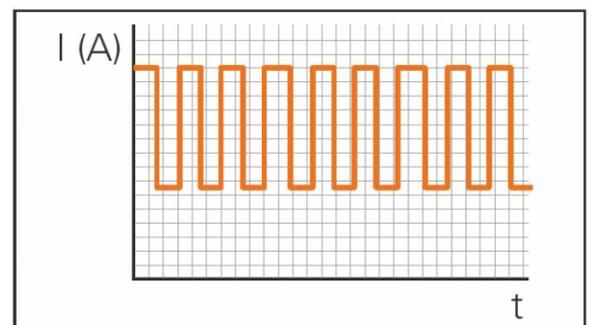
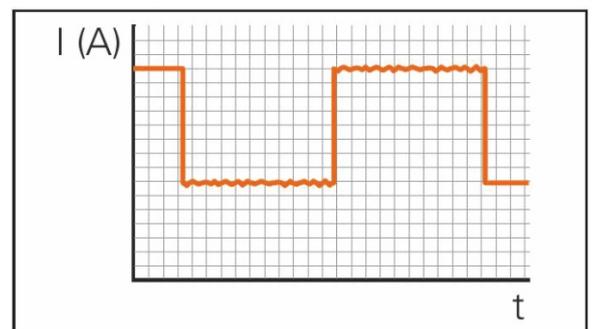
EASY PULSE”- SYN FUNCTION

“EASY PULSE-SYN” facility, in function of the chosen peak current, generates, in a simple and automatic way, an adequate pulse frequency and base current, both readjustable in a synergic way. Pulse parameter values preselected in the control will save setting time, by ensuring the best possible pulse parameter combinations, ideal for less skilled welders.



ULTRA FAST HIGH PULSE FREQUENCY

Pulse TIG welding allows a better arc control and less deformation of the workpiece. The possibility of utilizing very high pulse frequency, up to 2000 Hz, ideal for welding thin thickness, enables to obtain a remarkable reduction in the arc cone and in the thermally altered area, by also having a more stable and concentrated arc together with an increase in both penetration and speed too.



ACCESSORIES



➤ HR 23 water cooling equipment

➤ PSR 7 foot remote control

➤ CD 6 remote control

➤ Up/Down torch

FUNCTION		MATRIX 4200 HF	
		TIG	MMA
Three phase input 50/60 Hz	V	400 ±20%	
Input Power @ I ₂ Max	kVA	17	19.2
Delayed Fuse (I _{eff})	A	20	20
Open circuit voltage	V	85	85
Power Supply	A	3 - 420	10 - 400
Duty cycle	A 100%	320	300
	A 60%	370	340
	A 40%	420	400
Standards		EN 60974-1 • EN 60974-3 • EN 60974-10	
			
Protection Class	IP	23 S	
Insulation Class		F	
Suitable electrode	mm	1.2-4.0	1.6-6.0
Dimensions	 mm	560	
	 mm	220	
	 mm	425	
Weight	kg	25	



VRD - VOLTAGE REDUCTION DEVICE

VRD device reduces the open circuit voltage to values below 12V, by enabling the use of the machine in highly hazardous environments for the operator's maximum safety.

