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CEA

TIG

made in italy
SINCE 1950





MATRIX X HF

THE ULTIMATE SOLUTION FOR DC TIG

TIG INVERTER WELDING EQUIPMENT

MATRIX X HF are high efficiency TIG HF inverter power sources, studied to satisfy the most advanced and sophisticated requests in the TIG welding market.

MATRIX X HF enable TIG welding of mild and stainless steel, copper and its alloys and they also offer excellent performance in MMA welding with the most difficult basic and cellulosic electrodes.

MATRIX X HF



X Vision interface

MATRIX X HF are standard equipped with the new X VISION interface, simple and complete, for the total control and monitoring of all the welding parameters. Their excellent characteristics, coupled with the high technology of the digital control, allow a perfect stability of the welding arc, granting high performance TIG welding in the more sophisticated industrial applications and maintenance.



Single phase with PFC available

Thanks to PFC the single phase MATRIX X 220 HF optimizes the amount of energy consumption by allowing the use of this powerful power source with 16 A fuse mains and power generator sets.

Other characteristics

- TIG DC minimum current from 1A
- Excellent welding characteristics in TIG with all materials and MMA with any type of electrodes, cellulosic included
- Smart HF IGNITION for an accurate and prompter Arc Striking in all conditions
- Use of Up/Down TIG torches will enable to adjust welding parameters and JOBS
- Reduced weight and size, easy-to-carry
- Compact water cooling equipment integrable (optional)
- Simple automation: TSA1 TIG KIT (Optional)



TECHNICAL FEATURES



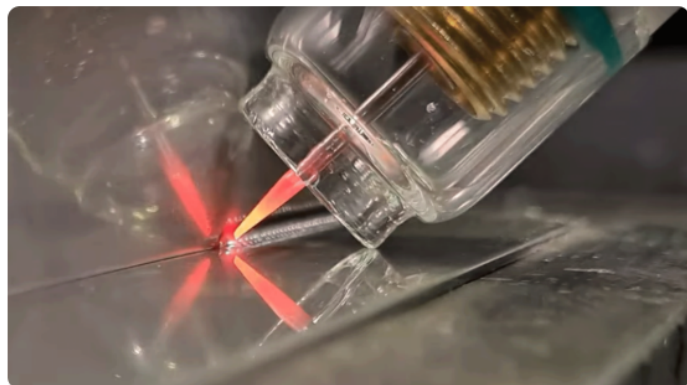
COLDTACK

Innovative spot welding device to achieve precise and safe joining with a minimal thermal input. Multi-cold.TACK function grants cold spotting in a rapid sequence, thus further widening the benefits of the single spot. Thanks to Perfect-Point function, cold.TACK allows to obtain the most precise spot positioning.

X VISION CONTROL DISPLAY TIG

X Vision control display with "ONE CLICK KNOB" encoder for the pre-setting and monitoring of all the welding parameters:

- User friendly interface
- Digital Ammeter and Voltmeter with welding current pre-setting and Hold Function of the last read value
- Welding mode "cycle"
- Personalized welding program storing and recalling
- Possibility of copying job/s easily from one machine to another via USB
- Advance setting infographic



TIG RCT - RUNNING COLDTACK

RCT is the acronym of Running cold.TACK; indeed, the TIG RCT process allows to benefit of all the cold.TACK advantages, by repeating the single cold.TACK point in a continuous way, in order to achieve a cold and perfect welding seam.

Using TIG RCT the welding seam is much colder in comparison to the one achievable with Pulse TIG and it represents the ideal solution to weld thin materials with a very low heat transfer. TIG RCT is a direct current process not available in AC welding.

PULSE MODE

SYN PULSE

SYN PULSE will synergically generate pulse frequency and base current

ULTRA FAST

Adjust frequency up to 2000 Hz

FAST PULSE

Adjust frequency from 0,5 Hz to 500 Hz

SLOW PULSE

Adjust separately current/time of peak and base





CYCLE FUNCTION

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

MMA FUNCTIONS

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



Available accessories

DISCOVER ALL AVAILABLE ACCESSORIES



HRX 20
032120



HRX 30
032115



HRX 40
032135



CEA CL-1100
402275A



TROLLEY VT 101
234929



TROLLEY CT 401
234931



CEA TORCH TXA 26.4
020562



CEA TORCH TXA 26.4
"UP/DOWN"
020662



CEA TORCH MINI TXH 20.4
020667



CEA TORCH MINI TXH 20.4
"UP/DOWN"
020680



CEA TORCH TXH 18.4
020672



CEA TORCH TXH 18.4
"UP/DOWN"
020677



**35 MM² / 4 M GROUND
CABLE WITH CLAMP**

239601



**REDUCER WITH
FLOWMETER AND 1
MANOMETER**

020916



**TSA1 - TIG SIMPLE
AUTOMATION KIT**

031118



DFX1
353485



CD 6/8
236243



PSR7
020919



**ADAPTER FOR TORCH AND
PSR 7**
460056



A6 KIT
460005

Datasheet

MATRIX X HF: TECHNICAL FEATURES

TECHNICAL DATA			MATRIX X 220 HF		MATRIX X 300 HF		MATRIX X 400 HF	
			TIG	MMA	TIG	MMA	TIG	MMA
Single phase input 50/60 Hz	V	+20% -20%	230		–		–	
Three phase input 50/60 Hz	V	+20% -20%	–		400		400	
Input power @ I ₂ max	kVA		5,2	6,0	8,5	8,5	16,2	19,4
Delayed Fuse (I ₂ @ 100%)	A		16		10		20	
Power factor / cos φ			0,99		0,96/0,99 – 0,95/0,99		0,74/0,99	0,84/0,99
Efficiency Degree			0,84		0,87		0,88	
Open circuit voltage	V		85		85		85	
Current range	A		1 -220	10 – 180	1-300	10 – 270	1-400	10-400
Duty cycle at (40°C)	A 100%		160	120	210	200	290	290
	A 60%		190	150	250	230	340	340
	A x %		220(30%)	180(30%)	300(35%)	270(35%)	400 (35%)	400 (35%)
Standards			EN 60974-1 • EN 60974-3 • EN 60974-10					
			S					
Protection Class	IP		23 S		23 S		23 S	
Dimensions (LxWxH)	mm		530 x 215 x 410		530 x 215 x 410		530 x 215 x 410	
Weight	kg		18		20		22	



WELDING TOGETHER

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