www.ceaweld.com

CEA

TIG

made in italy
SINCE 1950

MATRIX HF

THE PERFECT SOLUTION FOR DC TIG

TIG INVERTER WELDING EQUIPMENT

MATRIX HF are highly technologically advanced TIG power sources with a complete and user friendly interface for the total control of all welding parameters.
MATRIX HF grant excellent TIG welding performances with mild and stainless steel, copper and its alloys and are suitable to be used for the toughest industrial applications and maintenance.

MATRIX HF

Excellent performance

MATRIX HF offer excellent performances in MMA welding with the most difficult basic and cellulosic electrodes.
MATRIX 2200 HF optimizes the energy consumption with PFC device and is the ideal choice whenever power and portability are needed.

Other characteristics

- TIG DC min current from 1A
- Standard equipped with pulse mode integrated into the control with available “EASY PULSE” feature
- Excellent TIG welding characteristics
- HF IGNITION – Intelligent HF ignition grants a more accurate and prompter arc striking in all conditions.
- “Energy Saving” function to operate the power source cooling fan and the torch water cooling only when necessary.
- Use of special TIG torches will enable the remote control of the welding parameters directly from the torch
- Control panel protected against accidental impact
- Reduced weight and size, easy-to-carry
- Electrode type selection (MMA – MATRIX 3001 HF only)
- Possibility of memorizing welding parameters 99 JOBS (excluded MATRIX 3001 HF)
- LIFT ARC CURRENT – with possibility to set the value of the starting current in LIFT

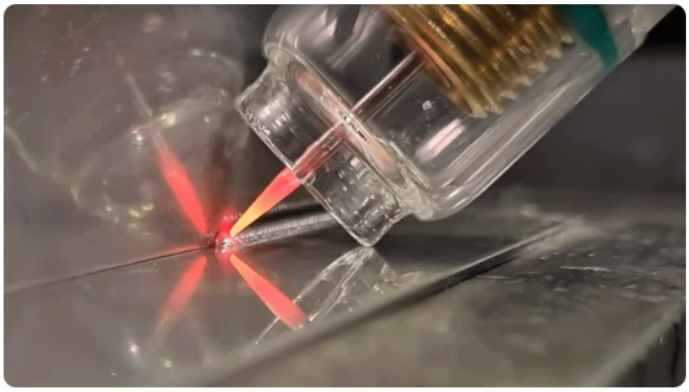
TECHNICAL FEATURES

CONTROL DISPLAY HF

- Welding process selector: TIG DC, TIG DC “Lift”, MMA DC
- Pulse TIG welding adjustable from 0,5 up to 2000 Hz with available “EASY PULSE” features
- Pulsation mode: Synergic, Fast, Ultrafast, Slow
- 99 program

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.

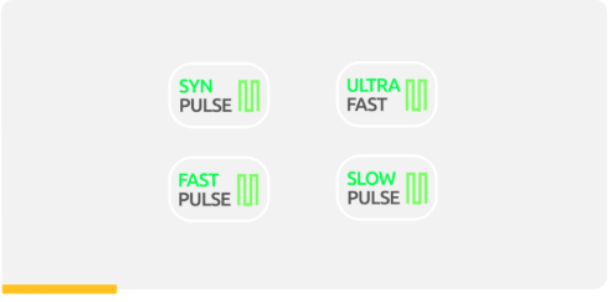


TIG RCT - RUNNING COLDTACK

RCT is the acronyms 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

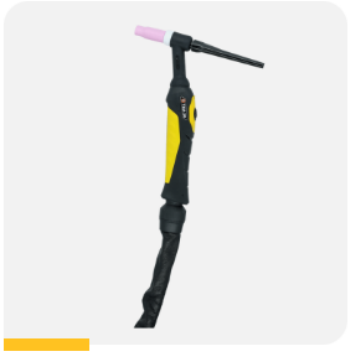
HR 22
032065

HR 23
032060

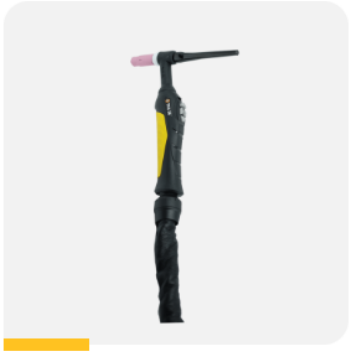
CEA CL-1100
402275A

TROLLEY VT 101
234929

TROLLEY VT 20
234921

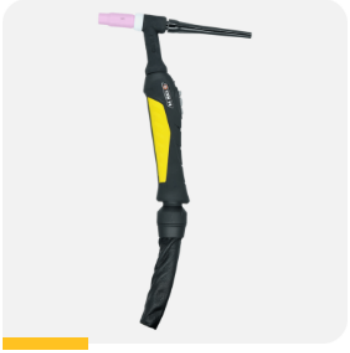


CEA TORCH TXA 26.4
020562



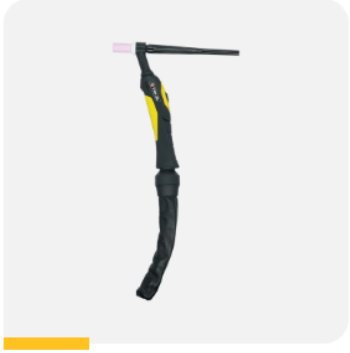
CEA TORCH TXA 26.4 "UP/DOWN"
020662

CEA TORCH TXH 18.4
020672



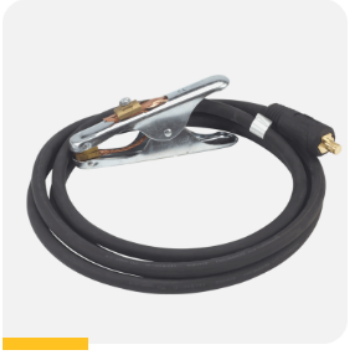
CEA TORCH TXH 18.4 "UP/DOWN"
020677

CEA TORCH MINI TXH 20.4
020667

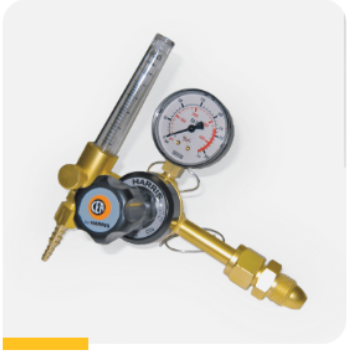


CEA TORCH MINI TXH 20.4 "UP/DOWN"
020680

35 MM² / 4 M GROUND CABLE WITH CLAMP
239601



50 MM² / 4 M GROUND CABLE WITH CLAMP
239603



REDUCER WITH FLOWMETER AND 1 MANOMETER
020916

CD 6/8
236243

PSR7
020919

ADAPTER FOR TORCH AND PSR 7
460056

A6 KIT
460005

Datasheet

MATRIX HF: TECHNICAL FEATURES

TECHNICAL DATA			MATRIX 2200 HF		MATRIX 2600 HF		MATRIX 3000 / 3001 HF		MATRIX 4200 HF	
			TIG	MMA	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		400	
Input power @ I_2 max	kVA		5,2	6,0	6,7	9,6	8,5	8,5	16,8	19,2
Delayed Fuse (I_2 @ 100%)	A		16		10		10		16	
Power factor / cos φ			0,99/0,99		0,95/0,99		0,95/0,99 – 0,96/0,99		0,95/0,99	0,95/0,99
Efficiency Degree			0,84		0,86		0,87		0,86	
Open circuit voltage	V		85	85	85		85		85	
Current range	A		1 – 220	10 – 180	1 – 260	10 – 250	1 – 300	10 – 270	3 – 420	10 – 400
Duty cycle at (40°C)	A 100%		160	120	200	190	210	200	270	
	A 60%		190	150	230	220	250	230	340	
	A X %		220(30%)	180(30%)	260(40%)	250(40%)	300(35%)	270(35%)	420 (40%)	400 (40%)
Standards			EN 60974-1 • EN 60974-3 • EN 60974-10							
			S							
Protection Class	IP		23 S		23 S		23 S		23 S	
Dimensions (LxWxH)	mm		465 x 185 x 390		495 x 185 x 390		495 x 185 x 390		560 x 220 x 425	
Weight	kg		14		17,5		17,5		25	

WELDING TOGETHER

www.ceaweld.com

BRIDGE 4 COMPANIES
bridge4companies.com

CEA COSTRUZIONI ELETTROMECCANICHE ANNETTONI S.p.A. - C.so E. Filiberto, 27 - 23900 LECCO - ITALY
Cas. Post. (P.O. BOX) 205 - Tel. +39 0341 22322 - Fax +39 0341 422646
vendite@ceaweld.com - export@ceaweld.com

www.ceaweld.com