

MATRIX 420 HF

Based on the very latest IGBT inverter technology, MATRIX 420 HF with high frequency arc striking is equipped with an innovative digital panel for the complete control of all the welding parameters. The excellent technical characteristics of this welding machine, coupled with the feature of digital control, allow high quality TIG welding, suitable for the toughest industrial applications and maintenance. This highly advanced technology power source is robust and user friendly: DC output only, enable TIG welding of mild and stainless steel, copper and its alloy. MATRIX 420 HF also offers excellent performance in MMA welding with the most difficult basic and cellulosic electrodes.

Main 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, coldTACK allows to obtain the most precise spot positioning.

ULTRA FAST PULSE – Pulsazione ad alta frequenza

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.

VRD – Voltage Reduction Device

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

Features

- ◆ Compact and innovative design
- ◆ Metallic main structure with shock-proof fibre compound front panel
- ◆ Control panel protected against accidental impact
- ◆ Robust handle integrated into the chassis
- ◆ Reduced weight and size, easy-to-carry



EASY PULSE

Pulse TIG welding allows a better arc control and a contained workpiece deformation. The ability of choosing a high value of pulse frequency (up to 500 Hz) allows to achieve a more concentrated arc cone, ideal for welding thin materials. "EASY PULSE" feature, in function of the chosen peak current, will synergically generate, in a simple and automatic way, both an adequate pulse frequency (between 0.5 and 500 Hz) and a base current. Pulse parameter values preselected in the control will save setting time, by ensuring the best possible pulse parameter combinations, ideal for less skilled welders/operators.

CYCLE

"CYCLE" function allows, by simply pressing the torch trigger, continuously switching between two current values, previously preselected. This function is most suitable for welding different thickness profiles, requiring a continuous current adjustment change. In welding aluminium, the ability of using a higher start current favours the workpiece preheating.

- ◆ High performance on thin metal sheets Automatic compensation for mains voltage fluctuations within +20% -20%
- ◆ Use of special TIG torches will enable the remote control of the welding parameters directly from the torch

- ◆ Excellent TIG welding characteristics
- ◆ High frequency arc striking, precise and efficient even from long distance
- ◆ Very good MMA welding characteristics with any type of electrodes

- ◆ Low energy consumption
- ◆ Easy-to-use
- ◆ Standard equipped with pulse mode integrated into the control with available "easy-pulse" facility
- ◆ Digital control of all the welding parameters

Accessories (Included)

- ◆ Welding cable including earth clip
- ◆ TIG torch

Optional Accessories

- ◆ Electrode holder and welding cable
- ◆ Argon regulator
- ◆ Auto-Darkening Welding Helmet

TECHNICAL DATA		MATRIX 420 HF
Three Phase Input 50/60 Hz	V	400±20%
Input Power @ I ² max	kVA	13,3
Delayed Fuse (I ² @ 100%)	A	16
Power Factor / cos j		0,95 / 0,99
Efficiency Degree		0,85
Open Circuit Voltage	V	100
Current Range	A	5 - 420
Duty Cycle at (40°C)	100%	270
	60%	340
	40%	420
Standards		EN 60974-1 ■ EN 60974-3 ■ EN 60974-10 ■ S
Protection Class	IP	23 S
Insulation Class		F
Weight (kg)		25
Dimensions (mm) W x L x H		560 x 220 x 425