

Multi 250K









# New Digital Pulse Mig - 240 Volt, with 250 amps and Double Pulse Function.

With easy to use interface, this machine is the perfect companion when building your aluminium boat.



# **Functions:**

MMA (manual or synergic)
TIG (manual or synergic)
PULSED TIG (manual or synergic)
MIG-MAG (manual or synergic)

**PULSED MIG** (synergic and synergic/double pulsed)



Easy to use digital interface!

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# PLUS CONCEPT DIGITAL MULTIFUNCTION







Plus Concept is: Increased Welding Speed + Excellent Deposit Control

+ Greater Arc Stability + Deeper Penetration + Superior Weld Deposit Quality

#### **Traditional Pulse**

# MMMM

## **Plus Concept**



# **Plus Concept Benefits**

The forced dynamism of the PLUS CONCEPT achieves an ultra fast transfer droplet rate into the weld pool giving surprising results: it increase signi cantly the welding speed (up to 45%) and, at the same time, it increases the penetration of the weld. Higher speed, better penetration and less spatter means less energy used during the deposit and reduced deformation during the welding.



#### **Traditional Pulse**



#### **Plus Concent**



#### **Full Deeper Penetration**



Full penetration and greater depth of penetration in thicker materials can be obtained with the new PLUS CONCEPT programs. The increase in the arc transfer speed allows the welding of materials up to 15mm in one pass, with only a narrow gap, eliminating costly weld preps. This new process maintains the arc stability and allows long stick-out to enable the welding to be completed in a single pass. With this solution, due to the increased welding speed, a lot of time is saved and the energy required for the same weld is much less. Faster welding and energy reductions mean greater reduction of the distortion of the work-piece. Using PLUS CONCEPT in the application of heavy industry greatly improves the quality and notably reduces production costs.

## High Speed Pulse Mig Application



PLUS CONCEPT has available Pulse programs for most materials with better weld control and a smoother arc. Special waveforms and very fast dynamics increase the weld ability of all materials. A precision arc, smoother waveform and high frequency transfer allow a precise arc with lower pressure in the welding pool. As a result, the welding speed is increased up to 45% with the same arc energy as found in standard machines. The simplicity of the pulse control setting allows a fast approach to any welding, irrespective of the thickness and this results in a colder weld with exceptional appearance. Up to now, in certain applications where the pulse mig process would not be recommended, because of the higher heat in the join (compared to conventional welding), but now it is possible to improve quality and efficiency with the use of the new PLUS CONCEPT. Arc noise emissions are reduced with the smooth waveform in Pulse Mig too . It allows higher current applications without the typical loud noise of the arc.



#### Double Pulse Program



The DOUBLE PULSE program can be easily selected. A simple click in the front panel will switch from a standard pulse application to the advanced and fast double pulse without any other settings required from the operator. The frequency of the DOUBLE PULSE is easily adjusted from 0.5 to 4.0 pulses per second. DOUBLE PULSE offers more control over the weld pool improving out of position welding, better controls distortion and gives excelent wash and even leg length on fillet welds, an added bonus is the improved cosmetic appearance of the weld likened to a TIG finished weld.

# Mig Brazing

Programs for brazing are easy to use and covers special applications for the car industry and any welding with zinc steel.

#### Multi Function

PLUS CONCEPT is not only an Innovative fast Pulse and fast MIG-MAG machine but MMA and TIG mode are also available. The MMA and TIG function are top level technology and offer professional results for expert users. MMA and TIG mode has both manual and synergic adjustment, when the Synergic mode is selected, the user selects the welding process, which enables self regulation of the welding parameters by simply selecting the work-piece thickness. Special Lift arc start is used for tig arc ignition which makes the use of high frequency negligible. Remote control receptacle is available for connection of remote amperage controls.

# **PULSE MIG WELDER MULTI 250K**







# **MULTI 250K-Plus Conceptu**

# **High Productivity Welding Solution** MIG -TIG - MMA - 250 Amp DC Welder Synergic / Pulse / Double Pulse



















#### **Features**

- New "Plus Concept" Technology
- Latest European IGBT Inverter Technology
- High Speed Synergic Pulse Mig
- Synergic Mig Double Pulse
- High Speed Mig/Mag
- DC Tig with Manual and Synergic Programs
- MMA with Manual and Synergic Programs
- VRD Safety (Voltage Reduction Device)
- 2/4T Trigger Functions
- Up Slope Down Slope
- Variable Start Current and Crater Current
- Simple selection of welding programs
- Simple interface for easy operation
- Accepts wide voltage supply variations (170-270V)





#### **Technical Data**

Power Supply / Phases Rated Power

Welding Current - Mig Welding Current - MMA (A) Welding Current - Tig (A) Duty Cycle @ 40°C

No Load Voltage (V)

Open Circuit Voltage (V) l Max

I ieff Tig Arc Ignition Water Cooling Protection Class

**Insulation Class** 

Standards Size (mm) Weight (kg)

230v 1 Phase 9.1KVA

20A /14V - 250A /27.5V 20A /21V - 220A /28.8V 10A /10V - 250A /20.0V 40% @ 250 Amps

100% @ 160 Amps

90V

VRD On - 15V, VRD Off - 65V

37.5 A 24.0 Amps Lift Arc Optional IP21S

ISO/IEC 60974-1 340 x 400 x 620

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#### Interactive Front Panel



The Ergonomic and Auto Learning System is used in the powerful front panel interface where welding mode selection, program selection, adjustments and special settings coexist in a rugged panel, whereby a simple touch the user can instantly see the results they have selected.

#### Overview

The MULTI-250K is the most powerful multifunction Single Phase System that state of the art technology can offer. An industrial machine with multiple welding functions including Pulse Mig. Double Pulse Mig. High Speed Mig. DC Tig. and DC MMA (Stick). User friendly programs with synergic function are provided for all the welding processes making it suitable for even the inexperienced user. The Multi-250K encompasses all facets of the new PLUS CONCEPT technological development. PLUS CONCEPT is an innovative solution that is revolutionising the welding industry. Now, high efficiency welding is possible with Gas Metal Arc Welding, Pulse Arc and standard applications. The forced dynamism of the PLUS CONCEPT achieves an ultra fast transfer droplet rate into the weld pool giving surprising results: it increase significantly the welding speed (up to 45%) and, at the same time, it increases the penetration of the weld. Higher speed, better penetration and less spatter means less energy used during the deposit and reduced deformation during the welding. Using the Double Pulse function provides the ability to produce welds with TIG like finish with excellent control over the weld pool. The Multi-250K is a professional industrial machine that is lightweight and has available an optional trolley with gas bottle support, being 230v single phase gives great portability, it can be run from any 15 Amp power socket providing more flexible use for site and home workshop locations. Ideal for general engineers, boat building, sheet metal workshops, stainless steel fabricators, panel beaters, transport engineering and home workshops, Designed and built to meet with European norms conformity.

#### **Product Code: 250MULTI**

Standard option includes: Multi250, SB24-3M, Earth / Arc Lead 35mm x 4m, Argon Regulator, Gas Hose