



TRANSTIG AC/DC 200 SQUARE WAVE

The thyristor controlled 200 amp AC/DC rectifier
for high quality TIG applications

- Full AC and DC TIG, plus MMA (stick) welding capability
- Infinitely variable welding current from as low as 5 amps, upto 200 amps
- Precise and repeatable AC square-wave output, giving good weld cleaning on AC applications
- DC Pulsed TIG welding available with the optional remote pulse unit
- Excellent weld performance, particularly on thin gauge materials and aluminium

The Transtig AC/DC 200 Square Wave is a solid state controlled power source designed for AC and DC TIG welding, and MMA (Stick) welding of mild steel, stainless, aluminium and other materials.

Designed to produce a squarewave AC output for precision TIG welding of exceptionally high quality, the AC/DC 200 Square Wave is nevertheless simple for welders to use. Compact in size and fully mobile with a sturdy undergear, the power source is robust and reliable offering fabricators performance together with economy.

With the optional DC remote control pulsing unit, the welding current alternates between the peak and background current. As a result there is less workpiece deformation, reduced heat spread and much better weld pool control making the AC/DC 200 Square Wave well suited to welding very light gauge material, and materials with low diffusibility, e.g. titanium, SS, nickel and non alloyed steels.



Standard Features

- Thyristor controlled—precise AC squarewave output.
- Slope-in and slope-out functions.
- MMA and AC, DC TIG welding capability.
- Gas post flow control.
- Water cooled torch and recirculator.
- Main voltage stabilization $\pm 10\%$.
- Fully mobile undergear, complete with cylinder carrier and water cooler tray.
- Foot control unit.
- Optional remote control pulsing unit for DC Pulsed TIG welding.

Why Squarewave AC

In conventional AC TIG and MMA welding using the sine wave in the normal way, it means that the welding current (and arc) is easily interrupted as the direction of the current changes from positive to negative. With the AC/DC 200 Square Wave the AC output is controlled by the electronics to give a "squarewave" which clips the current peaks, thus producing a balanced current.

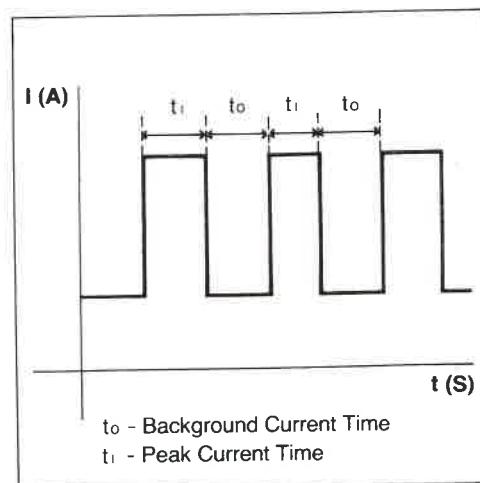
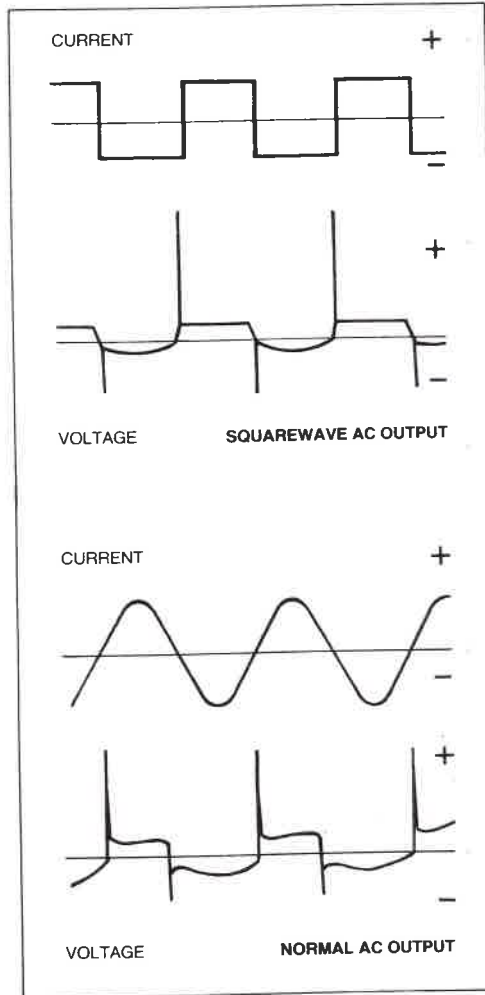
In aluminium TIG welding the AC/DC 200 Square Wave brings significant improvements in weld cleaning and quality. By controlling the current symmetry the risk of weld metal contamination due to the electrode being overloaded during peak currents (tungsten spitting) is greatly reduced. Furthermore, the current range of the electrode is extended increasing both the range of application and its life!

Stick welding using the AC/DC 200 Square Wave characteristics gives excellent results, with less spatter and less arc-deflection as the squarewave changes the direction of the current so quickly. This also results in smooth and stable burn-off, even with difficult to use electrodes, and makes all types of electrodes easier to strike.

Why Pulsed TIG

Using pulsed DC TIG welding the current alternates between preset peak and background currents. At the peak amperages the metal melts, and then partially solidifies during the background current time.

By varying both the peak and background currents and times, the welder can more easily control weld profile and penetration, and has greater control over heat spread and workpiece deformation. Additionally fabricators can produce repeatable weld profiles and quality in both manual and automatic applications.



Technical Specification

Output	
Open circuit voltage	AC 59v; DC 52
Current range	5-200 amps AC/DC
Rated 100% duty cycle	95 amps
60% duty cycle	145 amps
35% duty cycle	200 amps
Post-flow	0.5-30 secs
Crater fill	0.5-10 secs
Start current time	0.5-10 secs

Input	
Nominal voltage	220/380/415/440v
Phase	3
Frequency	50/60Hz

Pulsar (optional extra)	
Background current time setting	0.03-4.0 secs
Peak current time setting	0.03-2.0 secs

Other relevant data	
Rating specification	ISO700, BS638. 1979
Insulation class	H (180°)

Dimensions	
Height	700mm
Width	450mm
Length	950mm
Weight	135kg

Ordering Information

Transtig AC/DC 200 Square Wave package 1411307

Above package contains:
Transtig AC/DC 200 power source complete with undergear, primary cable, water and gas hoses
TW 250 water cooled TIG torch
TW 250 Accessory kit
2 pin MS plug
5m work return lead with clamp
Foot control unit
OCD water cooler
AR2 TIG Argon regulator
Argon flowmeter
Instruction manual and parts list

Optional Extras

Remote Pulsing Unit	320128881
5m Control Cable for pulsing unit	317922880
10m Control Cable for pulsing unit	317922881
5m Welding Lead and Electrode Holder	1403213

Full range of Tungsten electrodes and TIG & MMA Welding Accessories available from MUREX distributors and sales outlets.



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