

# PRO-WAVE® 400GTSW



PROCESS	HF TIG	LIFT TIG	STICK	PULSE TIG
<b>Part Number</b>	<b>Rated Output @ Duty Cycle</b>	<b>Output Range</b>	<b>Dimensions (H x W x D)</b>	<b>Net Weight</b>
10-1042 (208 - 230 / 460 V)	400 A / 36 V @ 40% 300 A / 32 V @ 60%	10 - 470 Amps (AC) 5 - 470 Amps (DC)	32" x 16.25" x 20.75" 810 x 410 x 529 (mm)	220 lbs. (100 kg)

The Thermal Arc® 400GTSW delivers both AC and DC welding power using proven IGBT power transformation technology to provide reliable service and unmatched arc control. This unit can provide stable arc characteristics down to 10 Amps on AC and 5 Amps on DC.

The 400GTSW uses a unique design that provides a true square wave (AC) GTAW operation with no continuous high frequency and power input draw as much as 50% under standard square wave machines.

Standard on the 400GTSW are AC balance control, AC frequency control, a built-in TIG Pulser, slope control, gas pre-flow and post-flow, gas solenoid, hot start and arc starting with either high frequency or lift TIG.

This unit is ideal for aircraft / airframe, boat marine, thin gauge aluminum, small fabrication shops, automated AC GTAW applications and any AC GTAW applications with limited input power or difficulties with high frequency interference.

## FEATURES

- Heavy Duty IGBT Inverter Design
- AC Welding with No Continuous H.F.
- 40% Duty Cycle @ 400 Amps (60% @ 325 Amps)
- Single Output Range
- AC Balance Control and Frequency Control
- Reduced Current Draw (29 Amps @ 400 Amps Output)
- 208 / 230 / 460 Volt, Single / Three Phase Input with Smart Link™
- 115 Volt Duplex Outlet (1.5 kVA)



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Brochure #0-0804

## ACCESSORIES

Foot Control, Amp Control, Water Cooled TIG Block, TIG Starter Kit, STICK Kit

### Effect of Wave Balance Adjustment on AC/GTAW-Complete Welding Control

Pro-Wave power sources' AC output uses a manually adjusted balance control. This control of the wave form changes the amount of time spent on DCEP ('cleaning') and DCEN ('penetration') parts of each cycle, increasing arc stability. The DCEP cycle insures that the aluminum oxide is thoroughly removed allowing the DCEN cycle a thorough penetration of the base metal. Both cycles enhance weld quality and significantly improve performance.

When a conventional system changes its wave balance, there can be as much as a 50% increase in amperage draw. Thermal Arc's Pro-Wave amperage draw is unaffected by any adjustments. Pro-Wave increases efficiency and eliminates tungsten spitting, and enables the use of a smaller diameter tungsten electrodes to operate at higher current levels. Figures 1 & 2 show the difference in the TIG torch electrode and heat and cleaning variations.

