

# STH 160/160 L

TIG/Stick Welding  
Power Source



## Quick Specs



### Light Industrial Applications

Process pipe  
Maintenance repair  
Restaurant/kitchen repair  
Experimental aircraft  
Dairy industry  
Food/beverage industry  
Shipboard installation/repair

### Processes

Stick (SMAW)  
TIG (GTAW)  
Pulsed TIG (GTAW-P)

### Input Power

230 V, 1-phase, 50/60 Hz

**Amperage Range** STH 160 Stick: 4–150 A  
STH 160 L Stick: 4–100 A  
TIG: 4–160 A

**Rated Output** 100 A at 100% duty cycle  
160 A at 20% duty cycle

**Max. Open-Circuit Voltage** 70 V

**Net Weight** 6.0 kg (13.2 lb.)



STH 160 model  
with WeldReady  
package shown.

### WeldReady packages include:

- Power source
- 3 m (10 ft.) power cord
- 3 m (10 ft.) electrode cable with holder and 25 mm Dinse-style connector
- 4 m (13 ft.) WP-17S4NXXF TIG torch
- 3 m (10 ft.) work cable with clamp and 25 mm Dinse-style connector
- 3 m (10 ft.) gas hose
- AK2C TIG torch accessory kit
- Shoulder strap

**Portable** in the shop or at the jobsite — at 6.0 kg (13.2 lb.) the shoulder strap allows the end user to easily move from location to location.

Inverter-based, DC power source has a **simple-to-use operator interface** providing only the necessary controls in a compact machine.

**Dual fan technology.** An optimised power source cooling system which enables the machine to operate at a lower temperature, thus increasing its performance and life cycle.

**Thermal overload protection with indicator light** helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

**VRD function** is a simple design that reduces the open-circuit voltage to 20 volts when the welding power source is not in use.

**Digital meter with presetting.** Shows preset current before welding and actual value during welding.

**Full-function remote control connector** for precise amperage control for critical welds on thin materials.

**Selectable trigger configuration** allows the operator to choose standard or 2T trigger method.

**Built-in gas solenoid** eliminates the need for a bulky torch with gas valve.

**Built-in upslope/downslope function** helps provide better arc starts and reduces craters.

**Adjustable preflow and postflow** gives operator better control of the gas parameters affecting weld zone.

**Lift-Arc™** start provides TIG arc starting without the use of high frequency or the risk of tungsten contamination.

**HF start** for non-contact TIG arc starting that eliminates tungsten or material contamination.

**Built-in pulsing capabilities** allow the operator to select from four fixed pulse frequencies to satisfy the application.

**Best-in-class stick and TIG arc characteristics** for those demanding jobs.

**Adjustable Hot Start™** for stick arc starts. Adjust the optimal start current for the application. The current automatically increases the output amperage at the start of a weld.

**Adjustable Arc Force™** prevents sticking. Adjust the optimal arc force value. Adjustable arc force supports positional welding by increasing the output amperage.

**Low stick output process** allows limiting of the maximum input line current (STH 160 L).



Warranted for three years, parts and labour.



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# Specifications (Subject to change without notice.)



Model/ Input Power	Welding Mode	Welding Amperage Range	Rated Welding Output	IP Rating	Amps Input at Rated Output, 50/60 Hz	KVA	KW	Max. Open- Circuit Voltage	Dimensions	Net Weight
STH 160, 230 V, 1-phase, 50/60 Hz	Stick	4–150 A	100 A at 24.0 VDC, 100% duty cycle	IP23	20	4.5	2.8	70 VDC (20 VDC*)	H: 245 mm (9.65 in.) W: 145 mm (5.75 in.) D: 380 mm (15 in.)	6.0 kg (13.2 lb.)
			150 A at 26.0 VDC, 25% duty cycle		30	7.0	4.8			
	TIG	4–160 A	100 A at 14.0 VDC, 100% duty cycle		13	3.0	2.0			
			160 A at 16.4 VDC, 20% duty cycle		22	5.1	3.5			
STH 160 L, 230 V, 1-phase, 50/60 Hz	Stick	4–100 A	100 A at 24.0 VDC, 100% duty cycle	IP23	20	4.5	2.8	70 VDC (20 VDC*)	H: 245 mm (9.65 in.) W: 145 mm (5.75 in.) D: 380 mm (15 in.)	6.0 kg (13.2 lb.)
			150 A at 26.0 VDC, 25% duty cycle		30	7.0	4.8			
	TIG	4–160 A	100 A at 14.0 VDC, 100% duty cycle		13	3.0	2.0			
			160 A at 16.4 VDC, 20% duty cycle		22	5.1	3.5			

\*VRD voltage.

All CE models conform to the applicable parts of the IEC 60974 series of standards.

## Ordering Information

Power Source	Stock No.	Description	Qty.	Price
<b>STH 160</b>	<b>059016013</b>	HF TIG with pulse/stick inverter. 230 V, single-phase, 50/60 Hz. Includes shoulder strap and 3 m (10 ft.) power cord		
<b>STH 160 WeldReady Package</b>	<b>029083128</b>	Includes power source, power cord, electrode cable with holder, TIG torch, work cable with clamp, gas hose, torch accessory kit and shoulder strap		
<b>STH 160 L</b>	<b>059016021</b>	Low stick output model. HF TIG with pulse/stick inverter. 230 V, single-phase, 50/60 Hz. Includes shoulder strap and 3 m (10 ft.) power cord		
<b>STH 160 L WeldReady Package</b>	<b>029083113</b>	Includes power source, power cord, electrode cable with holder, TIG torch, work cable with clamp, gas hose, torch accessory kit and shoulder strap		
<b>Accessories</b>				
Stick Welding Kit	<b>058066079</b>	3 m (10 ft.) electrode holder with cable and 3 m (10 ft.) work clamp with cable		
RCCS-6M	<b>195184</b>	4 m (13 ft.) remote fingertip control		
	<b>195503</b>	8 m (26.5 ft.) remote fingertip control		
RFCS-6M	<b>195183</b>	4 m (13 ft.) remote foot control		
	<b>195504</b>	6 m (20 ft.) remote foot control		
RMS-6M	<b>195269</b>	8 m (26.5 ft.) remote on/off control		
Dinse-Style Flow Thru Adapter	<b>195234</b>	25 mm adapter for TIG torch connection		
6-Pin Remote Plug	<b>217796</b>	6-pin remote plug to add to an existing remote		
TIG Torch	<b>WP-17S4NXXF</b>	4 m (13 ft.) A-150 air-cooled torch. 150 amps, 60% duty cycle		
Gas Hose	<b>9072000SL</b>	3 m (10 ft.)		

Date:

Total Quoted Price:

Miller recommends consumables

Distributed by:

