

# STH 270

Stick/TIG Welding  
Power Source



Quick  
Specs



IP23S

## Industrial Applications

Petro/Chemical  
Mechanical Contractors  
Shipboard Installation  
Process Piping

## Processes

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

**Input Power** 400 V, 3-Phase Power

**Amperage Range** 5–270 A

**Rated Output** 270 A, 30.8 V @ 40% Duty Cycle

**Weight** 24 kg (52.9 lb)

## The Power of Blue.®

**New!**

**Portable** in the shop or at the job site —at 24 kg the STH 270 easily moves 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.

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

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

**VRD function** is a simple design that reduces the open-circuit voltage to 12 volts when the welding power source is not in use.

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

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



**Remote amperage control** provided through 14-pin receptacle on front of the machine. This permits use of standard remote amperage control devices.

**Selectable trigger configuration** allows the operator to choose 2T or 4T trigger method.

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

**Adjustable Hot Start™** for Stick arc starts. Adjust the optimal start current for the application. The current auto-matically 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.

**Digital Meter** — preset amperage/voltage or actual while welding.

**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.

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

## Specifications (Subject to change without notice.)



Input Power Three Phase AC 50/60 Hz Voltage	Rated Welding Output		Max. Open Circuit Voltage	Amperage/ Voltage Range DC	KVA/KW @ Duty Cycle	Dimensions (in.)	Weight
STH 270	100%	40%					
400 Volts Stick	180A 27.2V	270 A 30.8 V	50 V	5–270 A 20 – 30.8 V	11.4 KVA/ 10.3 KW @ 40 % DC 7.9 KVA/ 7.0 KW @ 100% DC	L: 568 mm (22.4 in.) W: 219 mm (8.6 in.) H: 345 mm (13.6 in.)	Net: 24 Kg (52.9 lb) Ship: 26Kg (57.3 lb)
400 Volts TIG	180A 17.2V	270 A 20.8 V	50 V	5–270 A 10 – 20.8 V	7.7 KVA/ 6.7 KW @ 40% DC 4.8 KVA/ 4.0 KW @ 100% DC		

**TRUE BLUE**  
3YR WARRANTY

Warranted for 3 years, parts and labor.



### ITW Welding Products BV – Netherlands

Edisonstraat 10  
P.O. Box 1551  
NL-3261 LD Oud-Beijerland,  
Netherlands  
TEL: +31 (0) 186 641 444  
FAX: +31 (0) 186 640 880

### ITW Welding Italy S.r.l.

Via Privata Iseo 6/e  
20098 San Guiliano M.se  
Milano – Italy  
TEL.: +39 02 982901  
FAX: +39 02 98281552  
Email: itw@itw-welding.it

### International Headquarters Miller Electric Mfg. Co.

An Illinois Tool Works Company  
1635 W. Spencer Street  
Appleton, WI 54914 USA  
TEL.: +1 920 735 4554  
FAX: +1 920 735 4125  
www.millerwelds.com

# Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
STH 270	#059 016 024	400 VAC, 3 phase 50/60 Hz		
Water Coolant Systems				
HydraCool 270	#028 042 107	Water cooling system, 400VAC, 1 phase 50Hz		
Running Gear				
MH	#018 035 026	MH-two wheels cart		

Date:

Total Quoted Price:

