

# PowerARC 160i STH and Power 161 STH Cross Brand Comparison\*

## Stick? TIG? Both?

A Stick welder is versatile and productive in many settings. It can be used to fabricate or repair almost any material. Yet when it comes to the most refined, detailed work, it is a bit like using a club to hammer a tack. It can be done, but it isn't always the best solution.

A TIG welder is a very precise, and high quality alternative to stick welding. In a way they seem opposed to each other. The TIG process focuses on cleanliness of metal with a slow, methodical movement of the torch to make high quality welds where a Stick rod just can't reach. Clean up is virtually non-existent, and the final result is highly aesthetically appealing. TIG is considered an art

as much as it is a science and is often performed by the top tier of welding professionals.

There is overlap in both processes of course, and both when done properly can yield excellent results. There are times where either could be used, but there are times that one simply won't substitute for the other. The PowerARC models listed below have been designed with both DC Stick and DC TIG capability. Depending upon your needs, either unit stacks up well against the competition with excellent pricing, features and performance. We lead the competition in warranty with a 5 year parts and labor warranty on our IGBT based inverter welding and cutting products

									
	PowerARC 160i STH	PowerARC 161STH	Maxstar 161STL 90710	Maxstar 161STH 90711	Miniarc 161LTS 0558011934	Invertec V155-S K6206-1	Invertec V160 K1845-1	Vulcan ProTIG 165 63618	Stickmate 160i 500570
Price:	\$489.00	\$569.00	\$1315.00	\$1929.00	\$788.00	\$1523.00	\$1776.00	\$679.00	399.00
Voltage Input	120/240V	120/240V	120/240V	120/240V	120/240V	120/240V	120/240V	120/240V	120/240V
Max Rated Amp Input 120/240V Max Inrush or Manufacturer Stated Rated (Average)	29.7A 28.8A	29.7A 28.8A	23.1A 22.5A	23.1A 22.5A	32.5A 28.5A	34A 33A	25A 34A	20.7A 27.8A	21.4A 22.4A
Stick Duty Cycle @ Maximum Amps 120/240V	35% @ 90A 35% @ 160A	35% @ 90A 35% @ 160A	30% @ 130A 20% @ 160A	30% @ 130A 20% @ 160A	35% @ 110A 35% @ 160A	30% @ 100A 30% @ 145A	100% @ 80A 35% @ 160A	25% @ 90A 30% @ 165A	20% @ 65A 30% @ 160A
TIG Duty Cycle @ Maximum Amps 120/240V	35% @ 90A 35% @ 160A	35% @ 90A 35% @ 160A	30% @ 130A 20% @ 160A	30% @ 130A 20% @ 160A	35% @ 110A 35% @ 160A	30% @ 130A 30% @ 155A	100% @ 110A 35% @ 160A	25% @ 130A 30% @ 165A	Not TIG Capable
Max OCV	70V	70V	48V	48V	80V	75V	48V	15V	91V
Lift Start TIG (DC)	Live and Switch Based	Live and Switch Based	Yes	Yes	Yes	Yes	Yes	Yes	NA
HF Start TIG (DC)	Yes	Yes	No	Yes	No	No	Yes	Yes	NA
Digital Display	Yes	Yes	Yes	Yes	No	No	Yes	No	No
Pulse TIG (DC)	No	0-250Hz	No	0-150Hz	No	No	0-300Hz	2Hz	NA
Built in Gas Solenoid Valve for Gas Flow Control	Yes	Yes	Yes	Yes	No, Use Gas Valve Torch	No, Use Gas Valve Torch	Yes	Yes	NA
TIG Kit Included (Base Model)	Yes	Yes	No	No	No	No	No	Yes	NA
TIG Foot Pedal/ 2T/4T Torch Switch (Remote)	Yes	Yes	Yes	Yes	No	No	Yes	Yes	NA
Stick Arc Force Control (DIG, Inductance etc.)	Adjustable	Adjustable	Adaptive (Not Adjustable)	Adaptive (Not Adjustable)	Adaptive (Not Adjustable)	Adaptive (Not Adjustable)	Adaptive (Not Adjustable)	Not Listed	Adaptive (Not Adjustable)
Stick Voltage Reduction for Safety (VRD)	No	Yes	Yes	Yes	No	No	Select Via Internal Switch	No	No
Anti-Stick/Stuck Rod Feature	No	Yes	Yes	Yes	No	No	Yes	No	No
Stick Hot Start Time Adjustment	Auto	0-2 Seconds	Auto	Auto	Auto	Auto	Auto	Not Listed	Auto
Stick Hot Start Intensity Adjustment	0-100%	0-100%	Auto	Auto	Auto	Auto	Auto	Not Listed	Auto
E6010 (Cellulosic Rods) Capability	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Limited
Stick Output Range	5-160A	5-160A	20-160A	20-160A	5-160A	5-155A	5-160A	10-165A	20-160A
TIG Output Range	5-160A	5-160A	5-160A	5-160A	5-160A	5-155A	5-160A	10-165A	NA
TIG Pre-Flow Control	Fixed	0-25 Seconds	Fixed	Fixed	No	No	Fixed, .5 Seconds	Fixed	NA
TIG Post Flow Control	0-10 Seconds	0-25 Seconds	Auto	Auto	No	No	.5-30 Seconds	Fixed	NA
TIG Up-Slope	Fixed	Fixed	Fixed	Fixed	No	No	Fixed, .5 Seconds	Fixed	NA
TIG Down-Slope	0-10 Seconds	0-10 Seconds	Fixed	Fixed	No	No	.5-20 Seconds	Fixed	NA
Weight	25 lbs. (11kg)	25 lbs. (11kg)	13 lbs. (5.9kg)	13 lbs. (5.9kg)	18 lbs. (8.2kg)	14.7 lbs. (6.7Kg)	24.2 lbs. (11kg)	20 lbs. (9kg)	15 lbs.
Dimensions	6.5"Wx11.5"Hx16.5"L	6.5"@x11.5"Hx16.5"L	5.6"Wx10.3"Hx13.5"L	5.6"Wx10.3"Hx13.5"L	5.8"Wx10"Hx15.8"L	6.2"Wx11.3"Hx15.4"L	7.9"Wx12.6"Hx16.9L	7.5"Wx12"Hx15"L	7.1"Wx10.5"Hx13.4"L
Input Cable Length	6.5 Ft (2m)	6.5 Ft (2m)	6.5 Ft (2m)	6.5 Ft (2m)	10 Ft (3m)	6.6 Ft (2m)	10 Ft. (3m)	10ft (3m)	6.5 Ft (2m)
Warranty	5 Year Parts/Labor	5 Year Parts/Labor	3 Year Parts/Labor	3 Year Parts/Labor	3 Year Parts/Labor	3 Year Parts/Labor	3 Year Parts/Labor	1 Year Replacement	3 Year Parts/Labor

\*This publication is based on available information on April 25, 2019. It relies on other manufacturer data which is subject to change and may vary in accuracy. Prices are also subject to change and are based off of MSRP or stated prices. NA= Not Applicable. Not listed=No information available at the time of creation of this comparison.