

Dynasty® 280 Series

TIG/Stick Welding Power Source  

Quick Specs



Industrial Applications

Precision fabrication
Heavy fabrication
Pipe and tube fabrication
Aerospace
Aluminum ship repair
Anodized aluminum fabrication

Processes

AC/DC TIG (GTAW)
Pulsed TIG (GTAW-P)
Stick (SMAW)
Air carbon arc (CAC-A)

Input Power 208–575 V, 1-phase or 3-phase power

Amperage Range 1–280 A (DC)
2–280 A (AC)

Rated Output 200 A at 28 V, 60% duty cycle

Net Weight 52 lb. (23.6 kg)

Update and expand. Front panel memory card data port provides the ability to easily update software and expand product features.

Visit MillerWelds.com/TIGSoftware for the latest software updates and expansions.

Pro-Set™ eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls. Simply select the feature and adjust until Pro-Set appears on the display.

Sleep timer conserves electricity. This programmable feature will power down the machine if it sits idle for a specific time.

Allows for any input voltage hookup (208–575 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Cooler Power Supply (CPS) is an integrated 120-volt dedicated-use receptacle for the Coolmate™ 1.3. Available on select models, see page 6.

Cooler-On-Demand™ feature operates the auxiliary cooling system only when needed, reducing noise, energy use, and airborne contaminants pulled through the cooler.

Note: Cooler-On-Demand is only available on CPS models.

Blue Lightning™ high-frequency (HF) arc starter for non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional



Dynasty 280

Dynasty 280 DX



Meter calibration allows digital meters to be calibrated for certification.

Wind Tunnel Technology™ protects internal electrical components from airborne contaminants, extending the product life.

Fan-On-Demand™ power source cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through the machine.

Insight Core™ Internet-based solution that monitors and reports welding activity for basic productivity and quality measures. DX models only.


Insight Centerpoint™ Advanced solution that drives productivity and ensures weld quality by providing real-time weld operator feedback and machine control. DX models only.


AC TIG Features

Balance control provides adjustable oxide removal which is essential for creating the highest quality aluminum welds. DX models provide extended ranges.


Frequency controls the width of the arc cone and can improve directional control of the arc.

AC Waveforms

 **Advanced squarewave**, fast freezing puddle, deep penetration and fast travel speeds.

 **Soft squarewave** for a soft buttery arc with maximum puddle control and good wetting action.

 **Sine wave** for customers that like a traditional arc. Quiet with good wetting.

 **Triangular wave** reduces the heat input and is good on thin aluminum. Fast travel speeds.

DC TIG Features

Exceptionally smooth and precise arc for welding exotic materials.

AC/DC Stick Features

DIG control allows the arc characteristics to be changed for specific applications and electrodes. Lower the DIG setting for smooth running electrodes like E7018 and increase the DIG setting for stiffer, more penetrating electrodes like E6010.

Specifications (Subject to change without notice.)



Welding Mode	Input Power	Welding Amperage Range	Rated Output	Amps Input at Rated Load Output, 50/60 Hz								Max. Open-Circuit Voltage	Dimensions	Net Weight
				208 V	230 V	400 V	460 V	575 V	KVA	KW				
TIG (GTAW)	3-phase	2–280 A (AC) 1–280 A (DC)	235 A at 19.4 V, 60% duty cycle	19	17	10	9	7	7.0	6.7	60 VDC (11 VDC**)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 22.5 in. (569 mm)	52 lb. (23.6 kg) 55 lb. (25 kg) with CPS	
	1-phase	2–280 A (AC) 1–280 A (DC)	235 A at 19.4 V, 60% duty cycle	33	30	17	15	12	6.9	6.8				
Stick (SMAW)	3-phase	5–280 A	200 A at 28 V, 60% duty cycle	22	20	11	10	8	8.2	7.9				
	1-phase	5–280 A	180 A at 27.2 V, 60% duty cycle*	34	31	17	15	12	7.1	7.0				