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Weldcraft™ W-280

Formerly WP-280

Hand-Held Water-Cooled TIG Welding Torches

Quick Specs

Model
W-280 Super Cool

Applications
Aerospace
Aluminum fabrication
Aluminum ship repair
Automotive
Exotic material fabrication
Light and heavy manufacturing
Maintenance and repair
Pipe and tube fabrication
Precision metal fabrication
Pressure vessel fabrication
Shipbuilding
Tool and die
Tube and pipe
Vocational

Rated Output
DC: 280 A, AC: 195 A

Duty Cycle 100%

Electrode Range
.020–1/8 in. (0.5–3.2 mm)

W-280 Super Cool™ TIG torch

Formerly known as the WP-280, the W-280 Super Cool is a reliable water-cooled torch designed for demanding, high-amperage applications. The W-280 Super Cool is engineered with innovative technology and welding efficiency in mind.

Super Cool technology provides additional surface area to increase cooling efficiency and capacity.

Reduce downtime due to overheating through consistent water-cooled performance.

Extend torch life with dependable water-cooled technology.

Reduce leakage of gas and water through secure mechanical fittings and connections.

Note: Torch delivered may vary slightly from image shown.



W-280 Super Cool
(301251)

TRUE BLUE® WARRANTY

Miller Electric Mfg. LLC
An ITW Welding Company
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Appleton, WI 54912-1079 USA

Equipment Sales US and Canada
Phone: 866-931-9730
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MillerWelds.com

Certified System ISO 9001 Quality

Torch Packages

Models		Braided Rubber		Braided Rubber with 50 mm Dinse
Old Model	New Name	12.5 ft. (3.8 m)	25 ft. (7.6 m)	25 ft. (7.6 m)
WP-280	W-280 Super Cool™	301251012	301251025	301251001*

Torch packages include torch body, handle, power cable, gas hose, water hose, and long back cap.

**Cable cover included.*

Connectors

Power cable connectors



195377
50 mm Dinse-style with water return line for water-cooled torch.



195380
50 mm Dinse-style gas thru with gas and water return lines for water-cooled torch.



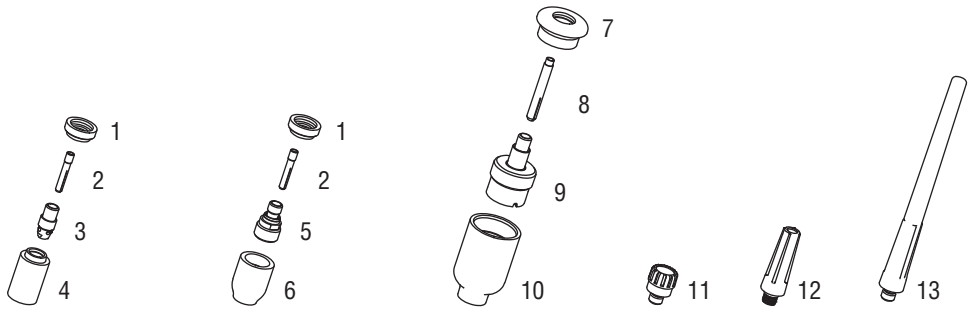
225028
50 mm thread-lock-style for water-cooled torch.



45V11
Power cable adapter for water-cooled torch.

Machines	Connection Type	1-Piece Power Cable Connectors
TIG Machines		
CST® 280 (Dinse)	50 mm Dinse-style	**195377**
Dynasty® 200/210/280/350/400	50 mm Dinse-style	**195377**
Dynasty® 700/800	50 mm thread-lock	**225028**
Maxstar® 200/210/280/350/400	50 mm Dinse-style	**195377**
Maxstar® 700/800	50 mm thread-lock	**225028**
Syncrowave® 200/210	50 mm Dinse-style gas thru	**195380**
Syncrowave® 250 DX/300/350 DX (Dinse)	50 mm Dinse-style	**195377**
Syncrowave® 250 DX/300/350 DX (stud)	1/2 in. stud	**45V11**
Multiprocess Machines		
Dimension™ 302/452/NT 450/650/652	1/2 in. stud	**45V11**
Dynasty® 280 DX Multiprocess	50 mm Dinse-style	**195377**
Multimatic® 255	50 mm Dinse-style	**195377**
PipeWorx	1/2 in. stud	**45V11**
XMT® 304/350	50 mm Dinse-style	**195377**
XMT® 450	1/2 in. stud	**45V11**
Engine-Driven Machines		
Most Big Blue®, Trailblazer®, Bobcat™, Blue Star® and Wildcat® models	1/2 in. stud	**45V11**
Big Blue® 450 Duo CST	50 mm Dinse-style	**195377**
General Reference		
	50 mm Dinse-style	**195377**
	50 mm Dinse-style gas thru	**195380**
	50 mm thread-lock	**225028**
	1/2 in. stud	**45V11**
Other Adapter		
	Stud to Dinse-style adapter	**232728**

Consumables (Refer to Owner's Manual for additional replacement parts.)



Non-Gas Lens									
Electrode Size — inch (mm)	.040 (1.0)		1/16 (1.6)		3/32 (2.4)		1/8 (3.2)		
1 Insulator (required)	598882		598882		598882		598882		
2 Collet	13N21		13N22		13N23		13N24		
3 Collet Body	13N26		13N27		13N28		13N29		
Nozzle Size — size # (inch)	3 (3/16)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
4 Alumina	—	13N08	13N09	13N10	13N11	13N12	13N13	—	—
* Lava	—	13N14	13N15	13N16	13N17	—	13N19	—	—
* Long Lava	796F70	—	796F72	796F73	—	—	—	—	—
* X-Long Lava	796F74	796F75	—	796F77	—	—	—	—	—

Gas Lens									
Electrode Size — inch (mm)	.040 (1.0)		1/16 (1.6)		3/32 (2.4)		1/8 (3.2)		
1 Insulator (required)	598882		598882		598882		598882		
2 Collet	13N21		13N22		13N23		13N24		
5 Gas Lens	45V42		45V43		45V44		45V45		
Nozzle Size — size # (inch)	3 (3/16)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
6 Alumina Gas Lens	—	53N58	53N59	53N60	53N61	53N61S	—	—	—

Large Diameter Gas Lens									
Electrode Size — inch (mm)	.040 (1.0)		1/16 (1.6)		3/32 (2.4)		1/8 (3.2)		
7 Insulator (required)	54N63-20		54N63-20		54N63-20		54N63-20		
8 Collet	13N21L		13N22L		13N23L		13N24L		
9 Large Diameter Gas Lens	45V0204S		45V116S		45V64S		995795S		
Nozzle Size — size # (inch)	3 (3/16)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
10 Large Dia. Gas Lens	—	—	—	57N75	—	57N74	53N88	53N87	53N89
* Large Dia. Gas Lens-L	—	—	—	57N75L	—	57N74L	53N88L	53N87L	—
* Large Dia. Gas Lens-XL	—	—	—	57N75XL	—	57N74XL	53N88XL	53N87XL	—

Back Caps		
11 Short **41V33**	**12** Medium **41V35**	**13** Long **41V24**

**Not shown.*

Tungsten

Tungsten for the most demanding TIG welding applications!

Available in four types and industry-standard diameters, our line of Weldcraft™ tungsten electrodes has undergone rigorous testing to ensure the highest quality and durability. Color-coded packages include ten 7-inch (175 mm) tungsten electrodes.

Note: Refer to manufacturer SDS sheets for proper preparation and safety. Use proper ventilation/capture during preparation. Refer to manufacturer warning regarding ventilation.



Type	Diameter in. (mm)	Part #
2% Ceriated (EWCe-2)		
Performs well in DC welding and arc starting at low-current settings, and offers excellent performance in AC processes.	0.040 (1.0)	**WC040X7**
	1/16 (1.6)	**WC116X7**
	3/32 (2.4)	**WC332X7**
	1/8 (3.2)	**WC018X7**
	5/32 (4.0)	**WC532X7**
2% Lanthanated (EWLa-2)		
Provides excellent arc starting, arc stability and re-ignition, and less tip erosion in AC or DC welding. Can substitute for 2% Thoriated.	0.040 (1.0)	**WL2040X7**
	1/16 (1.6)	**WL2116X7**
	3/32 (2.4)	**WL2332X7**
	1/8 (3.2)	**WL2018X7**
	5/32 (4.0)	**WL2532X7**

Type	Diameter in. (mm)	Part #
Pure (EWP)		
Forms a clean, balled end when heated and provides good arc stability for AC welding with a balanced or unbalanced squarewave or sine wave.	0.040 (1.0)	—
	1/16 (1.6)	**WP116X7**
	3/32 (2.4)	**WP332X7**
	1/8 (3.2)	**WP018X7**
	5/32 (4.0)	—
Rare Earth (EWG)		
Combines the best of all alloying elements, and provides excellent arc stability in AC or DC welding.	0.040 (1.0)	—
	1/16 (1.6)	**WG116X7**
	3/32 (2.4)	**WG332X7**
	1/8 (3.2)	**WG018X7**
	5/32 (4.0)	—

Replacement Parts

Torch Body		
W-280		**301251**
Handle		
Knurled		**269335**
Braided Rubber Power Cables		
12.5 ft. (3.8 m)	**25 ft. (7.6 m)**	**50 ft. (15.2 m)**
269757	**269758**	**269759**
Braided Rubber Water Hoses		
12.5 ft. (3.8 m)	**25 ft. (7.6 m)**	**50 ft. (15.2 m)**
269766	**269767**	—
Braided Rubber Gas Hoses		
12.5 ft. (3.8 m)	**25 ft. (7.6 m)**	**50 ft. (15.2 m)**
—	**269771**	—

Genuine Miller® Accessories



Gas Lens Kit AK4GL
Includes one short back cap, one of each size (#6, #7, #8) alumina nozzle, and one of each size (1/16, 3/32, 1/8 inch) of the following: gas lens, collet, and 7-inch 2% ceriated tungsten electrode.



Accessory Kit AK4C
Includes one long back cap, one of each size (#5, #6, #7) alumina nozzle, and one of each size (1/16, 3/32, 1/8 inch) of the following: collet, collet body, and 7-inch 2% ceriated tungsten electrode.

Extension Kit
EK-1-25-R 25 ft. (7.6 m), rubber

Cable Covers
WC0183 11.75 ft. (3.6 m)
For use with torch package 301251012.
WC0182 24.25 ft. (7.4 m)
For use with torch packages 301251025 and 301251001.



Wireless Remote Foot Control 300429
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 90-foot (27.4 m) operating range.



Wireless Remote Hand Control 300430
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 300-foot (91.4 m) operating range.



RCC-14 Remote Contactor and Current Control 151086
East/west rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord with 14-pin plug.



RCCS-14 Remote Contactor and Current Control 043688
North/south rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord with 14-pin plug.



Low-Conductivity TIG Coolant 043810
Sold in multiples of four in 1-gallon recyclable plastic bottles. Miller coolants contains a base of ethylene glycol and deionized water to protect against freezing to -37° Fahrenheit (-38°C) or boiling to 227° Fahrenheit (108°C).

Distributed by:

Miller®
The Power of Blue®

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