

Weldcraft® W-250 Series

Formerly WP-20 Series

Hand-Held Water-Cooled
TIG Welding Torches



Quick Specs

Models

W-250
W-250 Valve

Applications

Aerospace
Dairy
Food/Beverage Industry
Light and Heavy Manufacturing
Maintenance and Repair

Petro/Chemical
Precision Fabrication
Shipbuilding
Tube and Pipe
Vocational

Rated Output

DC: 250 A, AC: 180 A

Duty Cycle 100%

Electrode Range

.020–1/8 in. (0.5–3.2 mm)

W-250 Series TIG Torches

Formerly known as the WP-20 Series, the W-250 Series provides consistent torch performance and long-term, trouble-free service. The W-250 Series, with around-the-head water-cooling, is constructed for welder's satisfaction.

Extend torch life and minimize downtime due to overheating with the efficient around-the-head cooling design.

Prevent leakages of gas and water with a secure connection in the mechanical fittings (W-250 Valve).

Easy hose replacement with the innovative mechanical fittings design (W-250 Valve).

Comfort and control increased with the lightweight, compact body design.



W-250
(WP-20)

W-250 Valve
(WP-20V)

Note: Torches delivered may vary slightly from images shown.



Torch is warranted for 1 year parts.



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Torch Packages

Models		Braided Rubber		Vinyl
Old Model	New Name	12.5 ft. (3.8 m)	25 ft. (7.6 m)	25 ft. (7.6 m)
WP-20	W-250	WP-20-12-R	WP-20-25-R	WP-20-25
WP-20V	W-250 Valve	—	—	WP-20V-25

V = Valve

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

Connectors

Power Cable Connectors



195 380
50-mm Dinse-style gas thru with gas and water return lines for water-cooled torch.



195 377
50-mm Dinse-style with water return line for water-cooled torch.



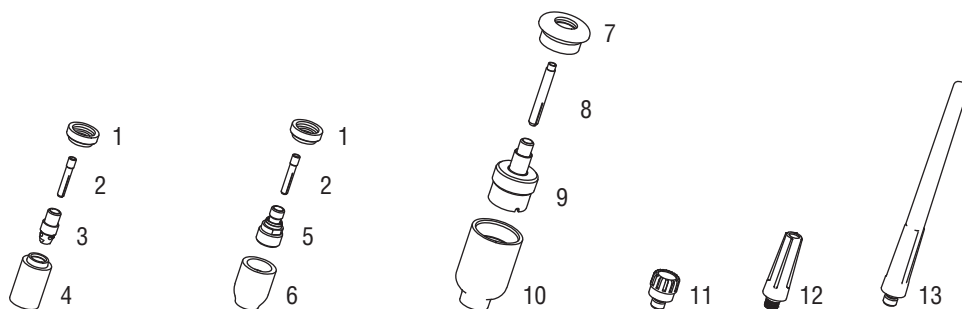
45V11
Power cable adapter for water-cooled torch.



225 028
50-mm thread lock-style for water-cooled torch.

Machines	Connection Type	1-Piece Power Cable Connector
TIG Machines		
Syncrowave® 200/210	50-mm Dinse, Gas Thru	195 380
Syncrowave® 250 DX/350 DX (Dinse)	50-mm Dinse	195 377
Syncrowave® 250 DX/350 DX (Stud)	1/2-in. Stud	45V11
Dynasty® 200/280/350, Maxstar® 200/280/350	50-mm Dinse	195 377
Dynasty® 700, Maxstar® 700	50-mm Thread Lock	225 028
Multiprocess Machines		
Dimension™ 302/452/NT 450/652	1/2-in. Stud	45V11
PipeWorx	1/2-in. Stud	45V11
XMT® 304/350	50-mm Dinse	195 377
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	195 377
General Reference		
	50-mm Dinse	195 377
	50-mm Dinse, Gas Thru	195 380
	50-mm Thread Lock	225 028
	1/2-in. Stud	45V11
Other Adapter		
	Stud to Dinse Adapter	232 728

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



Non-Gas Lens

Electrode Size — inch (mm)	.020 (0.5)		.040 (1.0)		1/16 (1.6)		3/32 (2.4)		1/8 (3.2)	
1 Insulator (required)	598882		598882		598882		598882		598882	
2 Collet	13N20		13N21		13N22		13N23		13N24	
3 Collet Body	13N25		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	13N18	13N19	—	—	
* Long Lava	796F70	796F71	796F72	796F73	—	—	—	—	—	
* X-Long Lava	796F74	796F75	796F76	796F77	—	—	—	—	—	

Gas Lens

Electrode Size — inch (mm)	.020 (0.5)		.040 (1.0)		1/16 (1.6)		3/32 (2.4)		1/8 (3.2)	
1 Insulator (required)	9-4		9-4		9-4		9-4		9-4	
2 Collet	13N20		13N21		13N22		13N23		13N24	
5 Gas Lens	45V41		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)	.020 (0.5)		.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		54N63-20	
8 Collet	13N20L		13N21L		13N22L		13N23L		13N24L	
9 Large Diameter Gas Lens	45V0204S		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	—
* Large Dia. Gas Lens-XXL	—	—	—	57N75XXL	—	57N74XXL	53N88XXL	53N87XXL	—

Back Caps

11 Short 41V33 12 Medium 41V35 13 Long 41V24

*Not shown.

Tungsten

A Line of Premium Tungsten for the Most Demanding TIG Welding Applications!

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

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



Type	Diameter in. (mm)	Part #	Type	Diameter in. (mm)	Part #
2% Ceriated (EWCe-2)			Pure (EWP)		
Performs well in DC welding and arc starting at low-current settings, and offers excellent performance in AC processes.	0.040 (1.0)	WC040X7	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)	WC116X7		1/16 (1.6)	WP116X7
	3/32 (2.4)	WC332X7		3/32 (2.4)	WP332X7
	1/8 (3.2)	WC018X7		1/8 (3.2)	WP018X7
	5/32 (4.0)	WC532X7		5/32 (4.0)	—
2% Lanthanated (EWLa-2)			Rare Earth (EWG)		
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	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)	WL2116X7		1/16 (1.6)	WG116X7
	3/32 (2.4)	WL2332X7		3/32 (2.4)	WG332X7
	1/8 (3.2)	WL2018X7		1/8 (3.2)	WG018X7
	5/32 (4.0)	WL2532X7		5/32 (4.0)	—

Genuine Miller® Accessories



Wireless Remote Foot Control #300 429
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 #300 430
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine.

300-foot (91.4 m) operating range.



RCCS-14 Remote Contactor and Current Control #043 688
North/south rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Includes 26.5-foot (8 m) control cord and 14-pin plug.



RCC-14 Remote Contactor and Current Control #151 086
East/west rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Includes 26.5-foot (8 m) cord and 14-pin plug.



Cable Covers
#WC-3-10 10 ft. (3 m)
#WC-3-22 22 ft. (6.7 m)

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



Low-Conductivity TIG Coolant #043 810
Sold in multiples of four in one-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).



#AK4C Accessory Kit
Includes one long back cap, three collets (one collet per size: 1/16, 3/32, 1/8), three collet bodies (one collet body per size: 1/16, 3/32, 1/8), three alumina nozzles (one nozzle per size: 5, 6, 7), and three 7-inch 2% ceriated tungsten electrodes (one electrode per size: 1/16, 3/32, 1/8).



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