

# Weldcraft™ W-350 Series

## Formerly WP-18 Series

Hand-Held Water-Cooled  
TIG Welding Torches



### QUICK SPECS

#### Models

W-350  
W-350 Valve

#### Applications

Aluminum fabrication	Metal fabrication
Aluminum ship repair	Pipe and tube fabrication
Automotive	Pressure vessel fabrication
Exotic material fabrication	Shipbuilding
Manufacturing	Tool and die
Maintenance and repair	Tube and pipe
	Vocational

**Rated Output** DC: 350 A, AC: 250 A

**Duty Cycle** 100%

**Electrode Range** .020–5/32 in. (0.5–4.0 mm)

### W-350 Series TIG torches

Formerly known as the WP-18 Series, the W-350 Series is comprised of rugged torches engineered for high-amperage and continuous hand-held welding in mechanized applications. With the W-350 Series, welders can handle their welding applications with more power and comfort.

**Reduce downtime and costs** by minimizing overheating with the unique cooling design engineered for operator comfort.

**Reduce discomfort and fatigue** using the comfortable handle design.

**Superior gas flow control** offered through the built-in fingertip gas control (W-350 Valve).

*Note: Torches delivered may vary slightly from images shown.*



W-350  
(WP-18)

W-350 Valve  
(WP-18V)



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An ITW Welding Company  
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**MillerWelds.com**



# Torch Packages

MODELS		RUBBER		VINYL	
Old Model	New Name	12.5 ft. (3.8 m)	25 ft. (7.6 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)
WP-18	W-350	<b>WP-18-12-R</b>	<b>WP-18-25-R</b>	<b>WP-18-12</b>	<b>WP-18-25</b>
WP-18V	W-350 Valve	—	<b>WP-18V-25-R</b>	—	<b>WP-18V-25</b>

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

## Connectors

### 1-piece power cable connectors



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



**301884**  
50 mm Dinse-style connector that adapts machines with flow through gas valves to coolers.



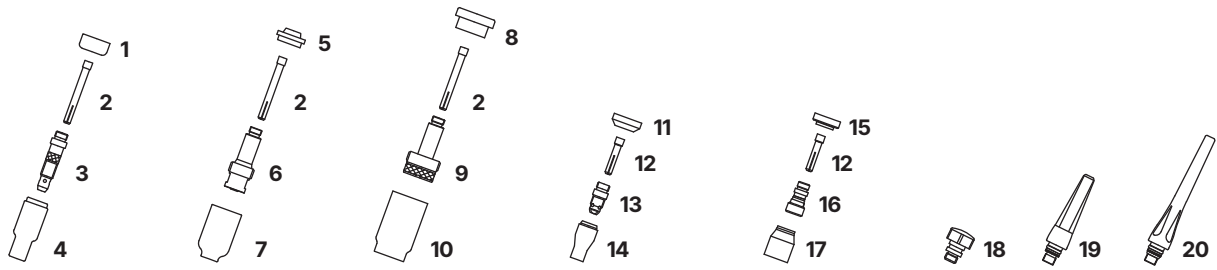
**225028**  
50 mm thread-lock-style for water-cooled torch.



**45V11**  
Power cable adapter for water-cooled torch.

MACHINES	CONNECTION TYPE	1-PIECE POWER CABLE CONNECTORS
<b>TIG Machines</b>		
CST™ 280/282	50 mm Dinse-style	<b>195377</b>
Dynasty® 200/210/280/300/350/400	50 mm Dinse-style	<b>195377</b>
Dynasty® 700/800	50 mm thread-lock	<b>225028</b>
Maxstar® 200/210/280/350/400	50 mm Dinse-style	<b>195377</b>
Maxstar® 700/800	50 mm thread-lock	<b>225028</b>
Syncrowave® 200/210/212	50 mm Dinse-style gas thru	<b>301884</b>
Syncrowave® 250 DX/300/350 LX/400	50 mm Dinse-style	<b>195377</b>
	1/2 in. stud	<b>45V11</b>
<b>Multiprocess Machines</b>		
Dimension™ 302/452/NT 450/650/652	1/2 in. stud	<b>45V11</b>
Dynasty® 280 DX Multiprocess/300 Multiprocess	50 mm Dinse-style	<b>195377</b>
Multimatic® 235/255	50 mm Dinse-style	<b>195377</b>
PipeWorx	1/2 in. stud	<b>45V11</b>
XMT® 304/350/400	50 mm Dinse-style	<b>195377</b>
XMT® 450/650	1/2 in. stud	<b>45V11</b>
<b>Engine-Driven Machines</b>		
Most Big Blue®, Trailblazer®, Bobcat™, Blue Star® and Wildcat® models	1/2 in. stud	<b>45V11</b>
Big Blue® 450 Duo CST	50 mm Dinse-style	<b>195377</b>
<b>Other Adapter</b>		
	Stud to Dinse-style adapter	<b>232728</b>

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



NON-GAS LENS									
<b>Electrode Size — inch (mm)</b>	<b>.040 (1.0)</b>		<b>1/16 (1.6)</b>		<b>3/32 (2.4)</b>		<b>1/8 (3.2)</b>		<b>5/32 (4.0)</b>
1 Insulator (required)	18CG		18CG		18CG		18CG		18CG
2 Collet	10N22		10N23		10N24		10N25		54N20
3 Collet Body	10N30		10N31		10N32		10N28		406488
<b>Nozzle Size — size # (inch)</b>	<b>4 (1/4)</b>	<b>5 (5/16)</b>	<b>6 (3/8)</b>	<b>7 (7/16)</b>	<b>8 (1/2)</b>	<b>10 (5/8)</b>	<b>12 (3/4)</b>	<b>Short</b>	
4 Alumina	10N50	10N49	10N48	10N47	10N46	10N45	10N44	—	
* Long Alumina	—	10N49L	10N48L	10N47L	—	—	—	—	
* Lava	—	—	105Z44	105Z45	08N78	—	—	—	
* Long Lava	—	105Z60	—	105Z61	—	—	—	—	
GAS LENS									
<b>Electrode Size — inch (mm)</b>	<b>.040 (1.0)</b>		<b>1/16 (1.6)</b>		<b>3/32 (2.4)</b>		<b>1/8 (3.2)</b>		<b>5/32 (4.0)</b>
5 Insulator (required)	54N01		54N01		54N01		54N01		54N01
2 Collet	10N22		10N23		10N24		10N25		54N20
6 Gas Lens	45V24		45V25		45V26		45V27		45V28
<b>Nozzle Size — size # (inch)</b>	<b>4 (1/4)</b>	<b>5 (5/16)</b>	<b>6 (3/8)</b>	<b>7 (7/16)</b>	<b>8 (1/2)</b>	<b>10 (5/8)</b>	<b>12 (3/4)</b>	<b>Short</b>	
7 Alumina Gas Lens	54N18	54N17	54N16	54N15	54N14	—	—	54N19	
* Long Gas Lens	—	54N17L	54N16L	54N15L	—	—	—	—	
LARGE DIAMETER GAS LENS									
<b>Electrode Size — inch (mm)</b>	<b>.040 (1.0)</b>		<b>1/16 (1.6)</b>		<b>3/32 (2.4)</b>		<b>1/8 (3.2)</b>		<b>5/32 (4.0)</b>
8 Insulator (required)	54N63		54N63		54N63		54N63		54N63
2 Collet	10N22		10N23		10N24		10N25		54N20
9 Large Diameter Gas Lens	45V0204		45V116		45V64		995795		45V63
<b>Nozzle Size — size # (inch)</b>	<b>4 (1/4)</b>	<b>5 (5/16)</b>	<b>6 (3/8)</b>	<b>7 (7/16)</b>	<b>8 (1/2)</b>	<b>10 (5/8)</b>	<b>12 (3/4)</b>	<b>Short</b>	
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	—	
STUBBY NON-GAS LENS									
<b>Electrode Size — inch (mm)</b>	<b>.040 (1.0)</b>		<b>1/16 (1.6)</b>		<b>3/32 (2.4)</b>		<b>1/8 (3.2)</b>		
11 Insulator (required)	18CG20		18CG20		18CG20		18CG20		
12 Stubby Collet	10N22S		10N23S		10N24S		10N25S		
13 Stubby Collet Body	17CB20		17CB20		17CB20		17CB20		
<b>Nozzle Size — size # (inch)</b>	<b>4 (1/4)</b>	<b>5 (5/16)</b>	<b>6 (3/8)</b>	<b>7 (7/16)</b>	<b>8 (1/2)</b>	<b>10 (5/8)</b>	<b>12 (3/4)</b>	<b>Short</b>	
14 Stubby Alumina	13N08	13N09	13N10	13N11	13N12	13N13	—	—	
STUBBY GAS LENS									
<b>Electrode Size — inch (mm)</b>	<b>.040 (1.0)</b>		<b>1/16 (1.6)</b>		<b>3/32 (2.4)</b>		<b>1/8 (3.2)</b>		
15 Insulator (required)	17GLG20		17GLG20		17GLG20		17GLG20		
12 Stubby Collet	10N22S		10N23S		10N24S		10N25S		
16 Stubby Gas Lens	17GL040		17GL116		17GL332		17GL118		
<b>Nozzle Size — size # (inch)</b>	<b>4 (1/4)</b>	<b>5 (5/16)</b>	<b>6 (3/8)</b>	<b>7 (7/16)</b>	<b>8 (1/2)</b>	<b>10 (5/8)</b>	<b>12 (3/4)</b>	<b>Short</b>	
17 Alumina Gas Lens	53N58	53N59	53N60	53N61	53N61S	—	—	—	
BACK CAPS									
18 Short	57Y04	19 Medium	300M	20 Long	57Y02				

\*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 #
<b>2% Ceriated (EWCe-2)</b>		
Performs well in DC welding and arc starting at low-current settings, and offers excellent performance in AC processes.	0.040 (1.0)	<b>WC040X7</b>
	1/16 (1.6)	<b>WC116X7</b>
	3/32 (2.4)	<b>WC332X7</b>
	1/8 (3.2)	<b>WC018X7</b>
	5/32 (4.0)	<b>WC532X7</b>
<b>2% Lanthanated (EWLa-2)</b>		
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)	<b>WL2040X7</b>
	1/16 (1.6)	<b>WL2116X7</b>
	3/32 (2.4)	<b>WL2332X7</b>
	1/8 (3.2)	<b>WL2018X7</b>
	5/32 (4.0)	<b>WL2532X7</b>
<b>Pure (EWP)</b>		
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)	<b>WP116X7</b>
	3/32 (2.4)	<b>WP332X7</b>
	1/8 (3.2)	<b>WP018X7</b>
	5/32 (4.0)	—
<b>Rare Earth (EWG)</b>		
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)	<b>WG116X7</b>
	3/32 (2.4)	<b>WG332X7</b>
	1/8 (3.2)	<b>WG018X7</b>
	5/32 (4.0)	—

# Replacement Parts

<b>Torch Bodies</b>		
W-350		<b>WP-18</b>
W-350 Valve		<b>WP-18V</b>
<b>Handles</b>		
W-350 (ribbed)		<b>H-200R</b>
W-350 Valve (knurled)		<b>H-200</b>
<b>Valve Knob</b>		
W-350 Valve		<b>VS-1</b>
<b>Braided Rubber Power Cables and Hoses</b>		
	<b>12.5 ft. (3.8 m)</b>	<b>25 ft. (7.6 m)</b>
Power Cable	<b>40V64R</b>	<b>41V29R</b>
Water Hose	<b>40V74R</b>	<b>41V32R</b>
Gas Hose	<b>40V75R18</b>	<b>41V30R18</b>
<b>Vinyl Power Cables and Hoses</b>		
	<b>12.5 ft. (3.8 m)</b>	<b>25 ft. (7.6 m)</b>
Power Cable	<b>40V64</b>	<b>41V29</b>
Water Hose	<b>40V74</b>	<b>41V32</b>
Gas Hose	<b>40V75</b>	<b>41V30</b>

# Genuine Miller® Accessories



### Gas Lens Kit AK3GL

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 AK3C

Includes one short back cap, one of each size (#5, #6, #8) 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.



### Accessory Kit MAK-2S

Includes one short and one long back cap, four back cap o-rings, two cup gaskets, one gas lens insulator, and one of each size (.040, 1/16, 3/32, 1/8 inch) gas lens. Also includes the following: ten collets (1) .040, (3) 1/16, (3) 3/32, (2) 1/8, (1) 5/32; and eight collet bodies (1) .040, (2) 1/16, (2) 3/32, (2) 1/8, (1) 5/32.

### Extension Kit

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



### Cable Covers

**WC-3-10** 10 ft. (3 m)  
**WC-3-22** 22 ft. (6.7 m)



### Wireless Remote Foot Control 301580

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 301582

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

Must be ordered in quantities of four. One-gallon recyclable plastic bottle. 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:

