

# Weldcraft™ A-80 Series

## Formerly WP-24 Series

**Hand-Held Air-Cooled  
TIG Welding Torches**



### Quick Specs

#### Models

A-80  
A-80 Flex  
A-80 Flex Valve

#### Applications

Shipbuilding  
Motorsports  
Aviation  
Restricted areas

#### Rated Output

DC: 80 A, AC: 50 A

#### Duty Cycle

60%

#### Electrode Range

.020–3/32 in. (0.5–2.4 mm)

### A-80 Series TIG torches

Formerly known as the WP-24 Series, the A-80 Series consists of innovative torches designed for intricate welding applications, especially in limited-access areas and on thin-gauge materials. The A-80 Series torches deliver comfort and versatility for a variety of welding applications.

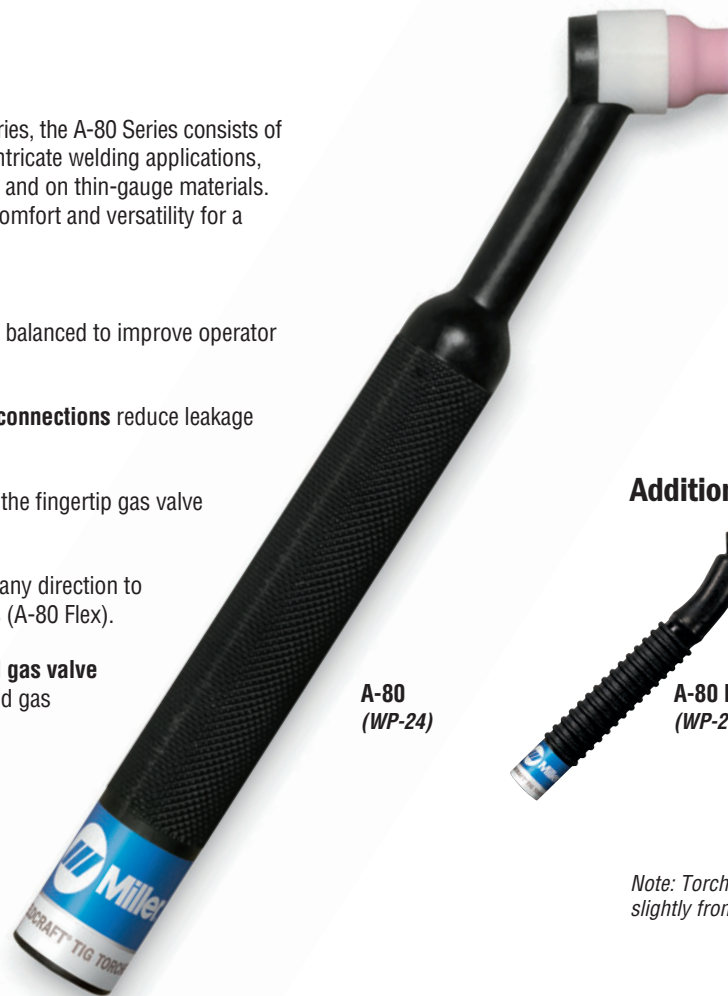
**Featherweight torch body** is well balanced to improve operator comfort and control.

**Secure mechanical fittings and connections** reduce leakage of gas and water.

**Easy gas-flow adjustment** using the fingertip gas valve (A-80 Flex Valve).

**Flexible neck** can be adjusted in any direction to facilitate welding in difficult joints (A-80 Flex).

**Combining the flexible neck and gas valve** is ideal for optimal positioning and gas flow control (A-80 Flex Valve).

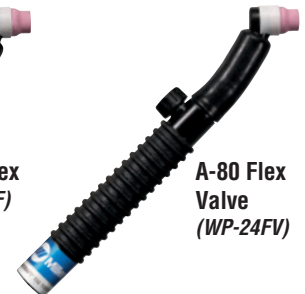


**A-80  
(WP-24)**

### Additional torch models



**A-80 Flex  
(WP-24F)**



**A-80 Flex  
Valve  
(WP-24FV)**

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



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**MillerWelds.com**  
f t y i n



## Torch Packages

Models		1-Piece Power Cable Standard Rubber	
Old Model	New Name	12.5 ft. (3.8 m)	25 ft. (7.6 m)
WP-24	A-80	WP-24-12-R	WP-24-25-R
WP-24F	A-80 Flex	WP-24F-12-R	WP-24F-25-R
WP-24FV	A-80 Flex Valve	WP-24FV-12-R	WP-24FV-25-R

*V = Valve F = Flex FV = Flex Valve*

*Torch packages include torch body, handle, and power cable.*

## Connectors

### 1-piece power cable connectors



**194722**  
50 mm Dinse-style  
gas thru for one-piece  
air-cooled torch.



**195378**  
50 mm Dinse-style for  
one-piece air-cooled torch.



**105257**  
Power cable adapter  
for one-piece  
air-cooled torch.



**273483**  
25 mm (small) Dinse-style  
gas thru for one-piece  
air-cooled torch.

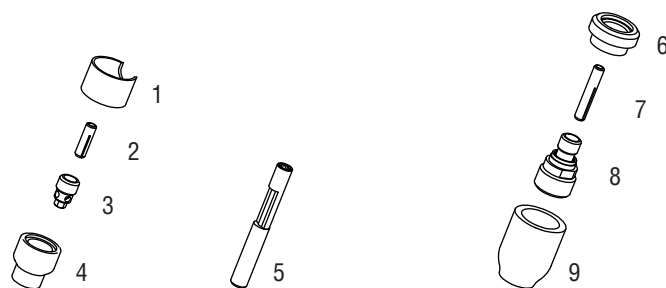


**24-5**  
3/8-24 male adapter for A-80.

Machines	Connection Type	1-Piece Power Cable Connectors	
<b>TIG Machines</b>		<b>A-80</b>	<b>A-80 Flex / A-80 Flex Valve</b>
Syncrowave® 200/210	50 mm Dinse-style gas thru	<b>194722*</b>	<b>194722</b>
Syncrowave® 250 DX/350 DX (Dinse)	50 mm Dinse-style	<b>195378*</b>	<b>195378</b>
Syncrowave® 250 DX/350 DX (stud)	1/2 in. stud	<b>105257*</b>	<b>105257</b>
Maxstar® 150 STL/STH	25 mm (small) Dinse-style gas thru	<b>273483*</b>	<b>273483</b>
Dynasty® 200/210/280/350, Maxstar® 200/210/280/350	50 mm Dinse-style	<b>195378*</b>	<b>195378</b>
<b>Multiprocess Machines</b>			
Multimatic™ 200	25 mm (small) Dinse-style gas thru	<b>273483*</b>	<b>273483</b>
PipeWorx	1/2 in. stud	<b>105257*</b>	<b>105257</b>
XMT® 304/350	50 mm Dinse-style	<b>195378*</b>	<b>195378</b>
<b>Engine-Driven Machines</b>			
Most Big Blue®, Trailblazer®, Bobcat™, Blue Star® and Wildcat® models	1/2 in. stud	<b>105257*</b>	<b>105257</b>
Big Blue® 450 Duo CST	50 mm Dinse-style	<b>195378*</b>	<b>195378</b>
<b>General Reference</b>			
	25 mm (small) Dinse-style gas thru	<b>273483*</b>	<b>273483</b>
	50 mm Dinse-style	<b>195378*</b>	<b>195378</b>
	50 mm Dinse-style gas thru	<b>194722*</b>	<b>194722</b>
	1/2 in. stud	<b>105257*</b>	<b>105257</b>
<b>Other Adapter</b>			
	Stud to Dinse-style adapter	<b>232728*</b>	<b>232728</b>

\*Requires 24-5 adapter.

## 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 Insulator (required)	53N22	53N22	53N22	53N22
2 Collet	53N15	53N16	53N14	24C332
3 Collet Body	53N17	53N18	53N19	24CB332
Nozzle Size — size # (inch)	.165	4 (1/4)	5 (5/16)	6 (3/8)
4 Alumina	—	A53N24	A53N25	A53N27
* Lava	53N23	53N24	53N25	53N27
* Long Lava	—	53N28	—	53N26

### Collet Body Wrench

5 53N20

### Gas Lens

Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	
6 Insulator (required)	53N66	53N66	53N66	53N66	
7 Collet	53N62	53N63	53N64	24GLC332	
8 Gas Lens	45V41	45V42	45V43	45V44	
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)
9 Alumina Gas Lens	53N58	53N59	53N60	53N61	53N61S

\*Not shown.