

Weldcraft™ W-410

Formerly CS410

Hand-Held Water-Cooled
TIG Welding Torches



Quick Specs

Model
W-410

Applications

Aerospace
Aluminum fabrication
Aluminum ship repair
Automotive
Exotic material fabrication
Light and heavy manufacturing
Maintenance and repair

Metal fabrication
Pipe and tube fabrication
Pressure vessel fabrication
Shipbuilding
Tool and die
Tube and pipe
Vocational

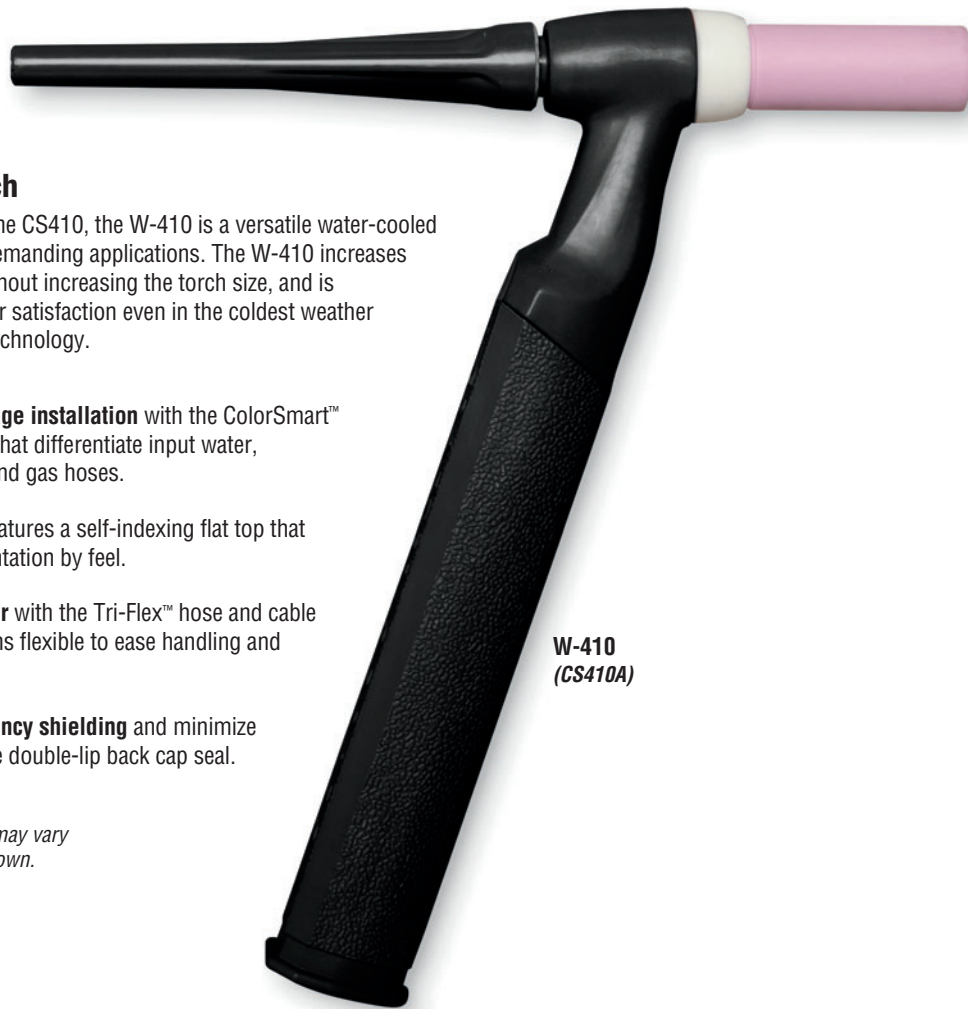
Rated Output

DC: 410 A, AC: 310 A

Duty Cycle 100%

Electrode Range

.020–5/32 in. (0.5–4.0 mm)



W-410
(CS410A)

W-410 TIG torch

Formerly known as the CS410, the W-410 is a versatile water-cooled torch designed for demanding applications. The W-410 increases amperage output without increasing the torch size, and is engineered for welder satisfaction even in the coldest weather with top of the line technology.

Simplify torch package installation with the ColorSmart™ hose and cable sets that differentiate input water, water/power cable, and gas hoses.

D-Handle™ design features a self-indexing flat top that allows for torch orientation by feel.

Work in cold weather with the Tri-Flex™ hose and cable assembly that remains flexible to ease handling and extends cable life.

Improve high-frequency shielding and minimize gas leakages with the double-lip back cap seal.

Note: Torch delivered may vary slightly from image shown.



Miller Electric Mfg. Co.
An ITW Welding Company
1635 West Spencer Street
P.O. Box 1079
Appleton, WI 54912-1079 USA

Equipment Sales US and Canada
Phone: 866-931-9730
FAX: 800-637-2315
International Phone: 920-735-4554
International FAX: 920-735-4125

MillerWelds.com
f t y i n



Torch Packages

Models		Braided Rubber		
Old Model	New Name	12.5 ft. (3.8 m)	25 ft. (7.6 m)	50 ft. (15.2 m)
CS410A	W-410	CS410-12	CS410-25	CS410-50

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

Connectors

Power cable connectors



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



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



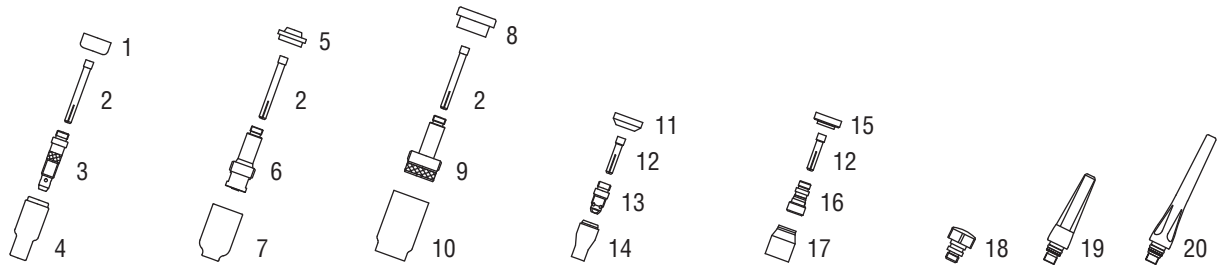
45V11
Power cable adapter for water-cooled torch.



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

Machines	Connection Type	1-Piece Power Cable Connectors
TIG Machines		
Syncrowave® 200/210	50 mm Dinse-style gas thru	195380
Syncrowave® 250 DX/350 DX (Dinse)	50 mm Dinse-style	195377
Syncrowave® 250 DX/350 DX (stud)	1/2 in. stud	45V11
Dynasty® 200/210/280/350, Maxstar® 200/210/280/350	50 mm Dinse-style	195377
Dynasty® 700, Maxstar® 700	50 mm thread-lock	225028
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-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)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)		
1 Insulator (required)	18CG	18CG	18CG	18CG	18CG	18CG	18CG	18CG
2 Collet	10N21	10N22	10N23	10N24	10N25	10N25	54N20	54N20
3 Collet Body	10N29	10N30	10N31	10N32	10N28	10N28	406488	406488
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
4 Alumina	10N50	10N49	10N48	10N47	10N46	10N45	10N44	—
* Long Alumina	—	10N49L	10N48L	10N47L	—	—	—	—
* Lava	105Z43	105Z42	105Z44	105Z45	08N78	08N79	08N80	—
* Long Lava	12N03	105Z60	12N02	105Z61	—	—	—	—
Gas Lens								
Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)		
5 Insulator (required)	54N01	54N01	54N01	54N01	54N01	54N01	54N01	54N01
2 Collet	10N21	10N22	10N23	10N24	10N24	10N25	54N20	54N20
6 Gas Lens	45V29	45V24	45V25	45V26	45V26	45V27	45V28	45V28
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
7 Alumina Gas Lens	54N18	54N17	54N16	54N15	54N14	—	—	54N19
* Long Gas Lens	—	54N17L	54N16L	54N15L	—	—	—	—
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)	5/32 (4.0)		
8 Insulator (required)	54N63	54N63	54N63	54N63	54N63	54N63	54N63	54N63
2 Collet	10N21	10N22	10N23	10N24	10N24	10N25	54N20	54N20
9 Large Diameter Gas Lens	45V0204	45V0204	45V116	45V64	45V64	995795	45V63	45V63
Nozzle Size — size # (inch)	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	—
Stubby 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)			
11 Insulator (required)	18CG20	18CG20	18CG20	18CG20	18CG20	18CG20	18CG20	18CG20
12 Stubby Collet	—	10N22S	10N23S	10N23S	10N24S	10N24S	10N25S	10N25S
13 Stubby Collet Body	17CB20	17CB20	17CB20	17CB20	17CB20	17CB20	17CB20	17CB20
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
14 Stubby Alumina	13N08	13N09	13N10	13N11	13N12	13N13	—	—
Stubby Gas Lens								
Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)			
15 Insulator (required)	17GLG20	17GLG20	17GLG20	17GLG20	17GLG20	17GLG20	17GLG20	17GLG20
12 Stubby Collet	—	10N22S	10N23S	10N23S	10N24S	10N24S	10N25S	10N25S
16 Stubby Gas Lens	—	17GL040	17GL116	17GL116	17GL332	17GL332	17GL18	17GL18
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
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 #	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)	—

Replacement Parts

Torch Body		
W-410	CS410A	
Handle		
D-Handle	CS210-H	
Braided Rubber Power Cables		
12.5 ft. (3.8 m)	25 ft. (7.6 m)	50 ft. (15.2 m)
CS410-12PC	CS410-25PC	CS410-50PC
Braided Rubber Water Hoses		
12.5 ft. (3.8 m)	25 ft. (7.6 m)	50 ft. (15.2 m)
GS310-12W	GS310-25W	CS410-50W
Braided Rubber Gas Hoses		
12.5 ft. (3.8 m)	25 ft. (7.6 m)	50 ft. (15.2 m)
CS410-12G	CS410-25G	CS410-50G

Genuine Miller® Accessories



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



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 contain 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:

