

Advanced Cooling Systems for Welding and Cutting

Efficient cooling is essential when working with powerful MIG, TIG, and Plasma machines. High welding currents generate significant heat in the torch, which can reduce performance, cause premature wear, and limit operator comfort. Canaweld cooling systems are engineered to maintain stable torch temperatures even under heavy-duty operating conditions. By circulating coolant through the torch and cables, the system dissipates excess heat, protects critical components, and improves overall welding performance. This allows the use of smaller and lighter torches for better handling, improved maneuverability, and reduced operator fatigue during long working hours. Reduced overheating also helps extend torch and consumable lifespan while lowering maintenance costs.

There are three cooling unit models available in the Canaweld product range. One model connects directly to the electrical mains and can be used with most welding and cutting machines, depending on power requirements. The other two models are specifically designed for Canaweld machines and support full system communication for enhanced torch protection and system control.

The characteristics of all three models, along with compatible machines, can be found in the specification table on the following page.



CU-H1801

Key Advantages

- Maintains stable torch temperature at high welding currents
- Extends torch and consumable lifespan
- Allows the use of compact and lightweight torches
- Improves operator comfort and productivity
- Supports reliable performance in demanding MIG, TIG, and Plasma applications
- Reduces overheating and maintenance requirements

Whether used in fabrication shops, heavy industry, pipeline work, maintenance applications, or precision welding environments, a dependable cooling system helps ensure maximum efficiency, durability, and consistent performance.

Canaweld Water Cooling Systems

Canaweld water Cooling systems provide efficient and reliable cooling for TIG, MIG, and Plasma applications. Designed with advanced engineering and compact construction, they are suitable for both light- and heavy-duty industrial use and are compatible with most welding and cutting machines on the market.



CU-H1501

Canaweld Key Features

- High-efficiency heat exchanger for maximum cooling performance
- Powerful separate fan and smart airflow design for maximum efficiency with minimum size and weight
- Brass regenerative turbine electric pump for reliable pressure and coolant flow, even with long torches or high-altitude operation
- Special filter designed to absorb particles within the coolant circulation system
- Multiple protection systems, including water circulation monitoring and pressure switch protection
- Special coolant liquid supplied with the system to lubricate the pump and protect against freezing during winter conditions
- Available in different cooling capacities to match various torch types and industrial applications.



CU-H1

Reliability & Quality Control

- Certified to IEC and CSA standards by CSA or QPS and manufactured in Canada. Canadian-built
- Extensive testing exceeding international standards, continuously monitored through advanced computerized test systems, under extreme temperature conditions to ensure consistent performance, long-term durability, and uncompromising reliability in the most demanding industrial environments
- Backed by Canaweld's industry-leading **4-year warranty**, with up to 5-year coverage on select components

Cooling System Specification

Cooling Unit Series		CU-H1	CU-H1501	CU-H1801
Input Voltage Range (Single Phase, 50/60 Hz)	V	220-240 (connected directly to the mains)	220-240 (powered by the welding machine power supply)	
Maximum Primary Current	A	1.3	1.65	1.7
Cooling Power at 1 L/min (as IEC standard)	W	1100	1400	1800
Rated Maximum Pressure (50/60 Hz)	psi (bar)	54 (3.7) / 68 (4.7)		
Pressure Switch Safety Protection		Yes	Yes	Yes
Flow switch Protection		Optional		
Internal Coolant Filter		Yes	Yes	Yes
Power Source Communication for Torch Protection		No	Yes	Yes
Tank Capacity	gal (L)	1.85 (7)	1.58 (6)	1.58 (6)
Recommended Machine Type		Any Brand (MIG, Plasma)	Canaweld TIG AC/DC 281 Pulse	Canaweld TIG AC/DC (351/421) Pulse, Multiprocess 5Pro (501/401), 8Pro 421, Multiprocess 421 Dual feeder
Weight	lb (kg)	42 (19)	46 (21)	61 (28)
Dimensions Including Handle (D x W x H)	in	26 x 9.2 x 15.7 (660 x 235 x 400)	26.5 x 8.2 x 16.5 (675 x 210 x 420)	30.3 x 12.2 x 15.7 (770 x 310 x 400)
* The IEC-rated cooling capacity is specified for 25°C (77°F) ambient temperature, a coolant flow rate of 1 L/min, and a coolant temperature increase of 40°C (72°F).				
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