

300/400/500 AMP AIR-COOLED ROBOTIC TORCHES



American Weldquip's air-cooled robotic torches offer you unsurpassed performance not found in competitive brands. Only high quality materials and workmanship go into each torch.

Since 1987 we have been engineering and manufacturing rugged and dependable robotic torches to help our customers lower maintenance costs, increase consumable life and ensure a lower cost of ownership.

Our combination of a heavy-duty torch design with a unique positioning flat, solid torch mount and the ArcSafe™ for collision protection provide a highly accurate, repeatable and low maintenance robotic package for precision welding and maximum productivity.

Don't be fooled by the imitators! Demand genuine American Weldquip products to insure you get the best Service, Quality, Solutions and performance you expect.

The WELDQUIP ADVANTAGE

ROBUST AIR-COOLED GOOSENECK DESIGN – American Weldquip robotic air-cooled goosenecks are designed for superior strength and heat dissipation.

Our goosenecks are manufactured using a heavy-walled brass outer tube, combined with additional crimping to a thick-walled extruded copper inner tube to provide added rigidity and unparalleled resistance to bending in “crash” situations.

Why do our competitors offer a quick change style gooseneck and we do not? Because they have too!! Our robust solid gooseneck design ensures less downtime due to less neck changes-outs, increased productivity and lower maintenance when compared to competitive torch designs.

“HEAT SINK” GOOSENECK TECHNOLOGY – The rugged gooseneck design effectively dissipates heat by providing a continuous metal to metal path from the nozzle to the front of the handle. The entire length of the outer jacket functions as a radiator pulling the heat from the front end consumables. The unique designs of the gooseneck, nozzle, diffuser, and contact tip function as a team to keep the front end consumables running cooler to insure longer life.

COAXIAL POWER CABLE ASSEMBLY – Designed and manufactured to American Weldquip's exact specifications to improve feedability and prolong cable life. Our protective cable outer jacket is made from cross-linked polyester which offers cut, burn and abrasion resistance. The power cable features heavy duty factory crimped cable end fittings to ensure a secure, positive electrical connection, producing less electrical resistance and less heat. Support springs at both the front and rear help to prevent feedability problems and relieve cable strain.

UNIQUE LOCATING FLAT – All American Weldquip robotic torches and mounting arms incorporate a unique locating/positioning flat. The precision machined mating surfaces guarantee repeatable and accurate TCP positioning when changing out components.

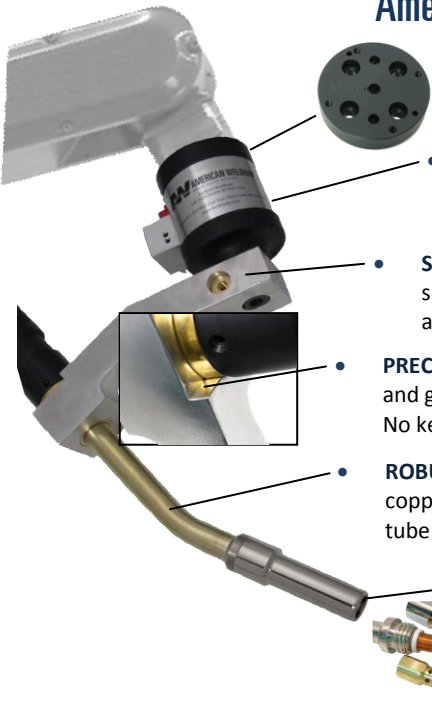
THREAD-ON NOZZLES – Our heavy walled nozzles thread directly on the gooseneck to provide cooler operation and a longer lasting nozzle system. The course thread, fixed position design feature insures a constant tip to nozzle relationship and consistent welding parameters.

COMMON CONSUMABLES – Most torches are designed to utilize the same nozzle, tip, diffuser and liner to help reduce your inventory of consumable parts.

OTHER AVAILABLE OPTIONS - include Internal Air Blast, Voltage Sensing, Touch Sensing and Replaceable Nozzle Seats.

CUSTOM SOLUTIONS – American Weldquip is capable of providing you custom engineered torches, mounts etc. to meet your specific requirements. Custom-designed torches can normally be completed in a matter of days!

American Weldquip's Total Robotic Package/Productivity Solutions



- **INSULATING DISK** – Designed to insulate robot and controller from welding current. In addition, protects robot in case of non-torch crash in the area of the ArcSafe™.
- **ARCSAFE™ and ARCSAFE™-SW** - provides the maximum collision protection in robotic applications. An inexpensive investment to protect equipment, tooling, reduce or eliminate expensive downtime and maintenance issues.
- **SOLID TORCH MOUNTS** – CNC machined from solid aluminum bar stock guarantees accuracy and superior rigidity. Will not bend or break. The ‘Flange Lock’ mounting feature insures TCP accuracy and orientation when installing on the ArcSafe™.
- **PRECISION LOCATING FLAT** – Our “Unique” precision machined locating flats between the torch mount and gooseneck provide accurate and repeatable TCP alignment when changing out torches or goosenecks. No keys or pins to come loose or fall out.
- **ROBUST GOOSENECK DESIGN** – Heavy-Duty, durable gooseneck with thick-walled brass outer tube and copper conductor provides superior strength in crash situations. The outer tube is crimped to the inner tube which increases bending resistance insuring less downtime and maintenance costs.
- **LONG LIFE CONSUMABLES** – The thread-on nozzle system, in combination with genuine American Weldquip contact tips and diffusers, work together as a team to provide cooler operation and extended life.



NOZZLE CLEANING STATIONS

The RCS-1000 Robotic Nozzle Cleaning Station offers a complete solution for precise and effective spatter removal and nozzle cleaning in robotic applications. Integrated features allow the easy use with any make and models of robotic equipment. The “Through the Cutter Spray” system helps to reduce cycle time which is important in high speed robotic welding environments.

TORCH RATINGS/STANDARD CONFIGURATIONS

TORCH SERIES	DESCRIPTION	100% Duty Cycle		60% Duty Cycle		TIP SIZE	TIP PART #	DIFFUSER	NOZZLE SIZE	NOZZLE PART #	INSULATING WASHER	LINER	GOOSENECK ANGLE
		CO 2	MIXED GAS AR/CO2	CO2	MIXED GAS AR/CO2								
300R	300A Air-Cooled	300A	275A	350A	300A	.035" (1.2mm) M6	75035511	75002007	9/16" (15.1mm)	75135601-I	75001003	750XX222T	SPECIFY
400R	400A Air-Cooled	400A	325A	450A	400A	.045" (1.2mm) M8	75045014	75004033	5/8" (15.9mm)	75146202	75001004	750XX228T	SPECIFY
500R	500A Air-Cooled	500A	400A	550A	500A	.045" (1.2mm) M8	75045014	75004033	5/8" (15.9mm)	75146202	75001004	750XX228T	SPECIFY

HOW TO ORDER

400R **-22** **AS** **-15** **P**
 ROBOTIC TORCH SERIES GOOSENECK ANGLE TORCH OPTIONS TORCH LENGTH WIRE FEEDER CONNECTION (SEE BELOW)
 AS = AIR BLAST/ANTI-SPATTER
 RS= REPLACEABLE NOZZLE SEAT
 TS= NOZZLE TOUCH SENSING
 VS= VOLTAGE SENSING

** Specify wire size and/or special configurations when ordering.

WIRE FEEDER CONNECTION OPTIONS

B-	EURO	H5 -	HOBART® #5	P -	PANASONIC®
C -	CENTURY®/POWCON®	K -	KOBELCO®	T -	TWECO®/HOBART® #4
CL -	CLOOS®	L -	LINCOLN® (LN7 STYLE)	TL -	LINCOLN® POWER FEED 10
D -	OTC®/DAIHEN®	LT -	L-TEC® 225	T5 -	TWECO® #5
DP -	OTC®/DAIHEN® DP SERIES	M -	MILLER®	W -	LINCOLN® WIREMATIC
		O -	OXO®		

