

ARCSAFE™ ADVANTAGE SERIES 300/500/550 AMP AIR/WATER-COOLED ROBOTIC TORCH SYSTEM



ENGINEERED FOR THE LATEST
GENERATION THRU THE ARM
ROBOTIC WELDING SYSTEMS

FLAT OUT THE BEST



American Weldquip's ARCSAFE™ ADVANTAGE Series "Thru the Arm" robotic system offers unsurpassed performance and features not found in competitive equipment.

The ArcSafe Advantage Series is designed and engineered using a modular concept and is easily adaptable to all "Hollow Wrist" type robots. This system design concept allows lower inventory requirements by offering a common front platform across multiple brand name robots. If your requirements change you can easily add or update your configuration by adding features to the existing platform instead of purchasing a whole new system.

The standard configuration includes the electrical rotary joint common to all robotic systems and the proper insulating adaptor disk which is used on robots with built-in software collision protection. Updating or changing system requirements is as easy as adding the necessary modules. Changing to water-cooling is as easy as adding the WC Module and gooseneck. Need additional crash protection or a wire lock? You can easily add the CSU collision unit or the Wire Lock Module

The ArcSafe Advantage systems unique rotary joint provides unlimited, continuous 360 degree rotation. The freedom of rotation allows for shorter rotational reorientations when weld programming. This feature reduces cycle times by allowing you to program the shortest off cycle path possible. The additional benefit of no cable twisting or torsional strain substantially increases cable life.

The Advantage Series quick change gooseneck incorporates our unique and proven "LOCATING FLAT" system. No pins or keys to fall out. American Weldquip's locating positioning flat has proven over and over again to be "FLAT OUT THE BEST" design to guarantee you repetitive TCP placement.

Our combination of a rugged heavy-duty torch system, unique gooseneck TCP locating, long life consumables and low maintenance design provide a highly accurate and repeatable "Thru the Arm" robotic package for precision welding and maximum productivity.

Demand genuine American Weldquip products to insure you get the best Service, Quality, Solutions and the performance you expect.

American Weldquip's Total Robotic Package/Productivity Solutions

MODULAR DESIGN



The ArcSafe Advantage Series module design concept system allows lower inventory requirements by offering a common front platform across multiple robot manufacturer models. The unique and high flexibility feature of the ArcSafe Advantage Series Modular design allows you to easily add-on our CSU internal collision sensor unit, wire lock system and air-blast/anti-spatter. The unit's rugged and simple design offers low maintenance, easy repair if required and ensures high productivity.

360 DEGREE CONTINUOUS ROTATION

The unlimited freedom of 360 degree continuous rotation allows for shorter rotational reorientations when weld programming. This feature reduces cycle times by allowing you to program the shortest off-cycle (air movement) path possible. The additional benefit of no cable twisting or torsional strain substantially increases cable life.



QUICK CHANGE GOOSENECK/ PRECISION LOCATING FLAT



The American Weldquip ArcSafe Advantage system utilizes a quick change gooseneck design for easy replacement. The gooseneck incorporates our unique proven design locating/positioning flat with precision machined mating surfaces to guarantee repeatable and accurate TCP positioning when changing out components.

ROBUST GOOSENECK DESIGN

American Weldquip robotic air-cooled goosenecks are designed for superior strength and heat dissipation. Manufactured using a heavy-walled brass outer tube, combined with additional crimping to a thick-walled extruded copper inner tube provide added rigidity and unparalleled resistance to bending in "crash" situations. 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.



The rugged gooseneck design also acts as a radiator to effectively dissipate heat by providing a continuous metal to metal path from the front end parts to keep the consumables running cooler to insure longer life.

LONG LASTING CONSUMABLES/GOOSENECK LINER



Genuine American Weldquip tips, nozzles, diffusers work together to provide cooler operation, extended life and superior electrical conductivity. For even longer tip life try our HRT Heat Resistant Technology contact tips. Most torches are designed to utilize the same nozzle, tip, diffuser and liner to help reduce your inventory of consumable parts.

95% of liner wear and dirt accumulation occur in the gooseneck. Why incur the cost of replacing the whole liner when you do not need to. The ArcSafe Advantage system is supplied as standard with a front loading gooseneck liner. Just remove the consumables, remove the gooseneck liner and install the new one. It is as easy as that and only takes one minute.

INSULATING ADAPTOR DISK



The insulating adaptor disk adapts the ArcSafe to various robot models. It is designed to insulate the robot and controller from welding current and protect the robot in case of non-torch crash in the area of the ArcSafe.

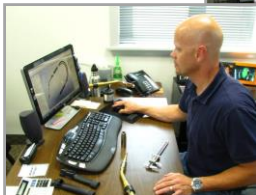
COLLISION ENHANCEMENT UNIT/WIRE LOCK

The Xtra Gard Collision Dampening Unit provides integrated crash protection with a little extra cushion to help prevent gooseneck bending in severe crash situations. The Xtra Guard allows for X and Y deflection of 15 degrees and Z axis of 1/4" to protect the torch, robot and equipment from damage.

The optional wire lock unit is used in wire touch sense applications where it is critical that the wire not move during the touch operation. The wire lock unit is pneumatically controlled. See Catalog Sheet CAT022 for more information.

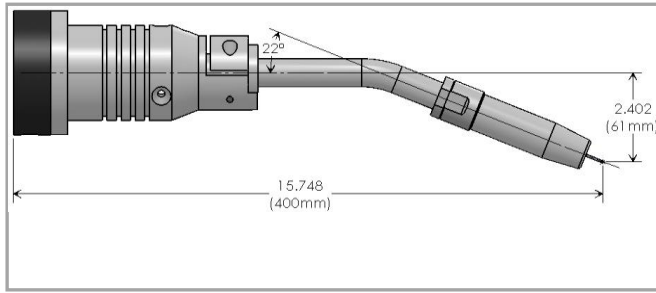


MADE IN THE USA

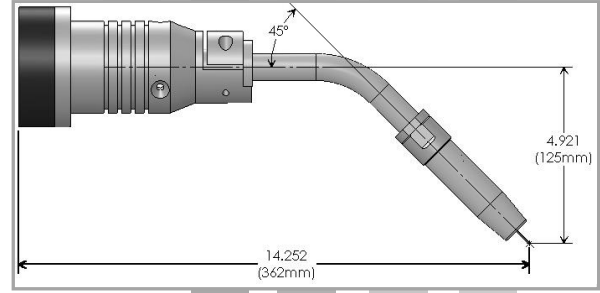


Engineered and manufactured in Sharon Center Ohio. Since 1987 we have been engineering and manufacturing rugged and dependable robotic torches to help our customers lower maintenance costs, increase consumable life and ensure a lower total cost of ownership.

DIMENSIONAL SPECIFICATIONS



300/500/550 SERIES
22 DEGREE



300/500/550 SERIES
45 DEGREE

WEIGHTS

300/500 Series – 2.2kg

550 Series – 2.5kg

SYSTEMS STANDARDS

SYSTEM SERIES	100% Duty Cycle		TIP SIZE	TIP PART #	DIFFUSER	NOZZLE SIZE	NOZZLE PART #	FEEDER CONNECTION	GOOSENECK ANGLE
	CO2	MIXED GAS AR/CO2							
300 Series – Air-Cooled	350A	300A	.035" (1.2mm) M6	75035511	75002007	9/16" (15.1mm)	75135601-1	EURO	Specify 22 or 45
500 Series – Air-Cooled	500A	400A	.045" (1.2mm) M8	75045014	75004033	5/8" (15.9mm)	75146202	EURO	Specify 22 or 45
550 Series – Water-Cooled	550A	425A	.045" (1.2mm) M8	75045014	75004033	5/8" (15.9mm)	75146202	EURO	Specify 22 or 45

HOW TO ORDER

Part number for the system provides everything you require for the specify robot make and model. Note that the standard system is for robots with built-in software crash detection.

Part Number Configuration

AST	- 322	- F	100IC	M	- AS
ArcSafe Advantage Series	GOOSENECK CONSUMABLES 322 – 300 Series A/C 22 Degree 345 – 300 Series A/C 45 Degree 522 – 500 Series A/C 22 Degree 545 – 500 Series A/C 45 Degree 622 – 550 Series W/C 22 Degree 645 – 550 Series W/C 45 Degree	ROBOT MAKE A – ABB F – FANUC K – KUKA M – MOTOMAN O – OTC P – PANASONIC	ROBOT MODEL Example Shown for Fanuc 100iC	WIRE FEEDER TYPE B- EURO L – Lincoln L10 – Lincoln PFeed 10 LU - Universal Lincoln M – Miller D – Daihen/OTC DP – Daihen/OTC DP Series P – Panasonic T – Tweco #4 T5 – Tweco #5	OPTIONS AS – Air Blast TS – Nozzle Touch Sense

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

OPTIONS

Xtra Gard Collision Protection – AST-2000(Must be ordered separate)

Voltage Sensing – Supplied Standard

Replaceable Nozzle Seat – Supplied Standard

Wire Lock Unit - WL-500(Coming Soon)

QUIP-MIST

NOZZLE CONDITIONER AND ANTI-SPATTER



QUIP-MIST is an exceptional performing, eco-friendly product that significantly reduces or eliminates spatter retention on weld nozzles, parts and tooling. Helps to extend the life of consumables, reduces downtime and increases productivity.

Extend the life of your consumables, reduce downtime and maintenance cost with Quip-Mist Nozzle Conditioner and Anti-Spatter.

87008SNC – 8oz. (236.89ml) Spray Bottle
870032NC – 32 oz. (946.35ml) Spray Bottle
870001NC – 1 Gallon (3.785l) Container
870005NC – 5 Gallon (18.927l) Cubetainer w/faucet
870055NC – 55 Gallon (208.20l) Drum

See Catalog Sheet CAT009 for more information

ROBO-QUIP ROBOTIC NOZZLE CLEANING STATION



The New **AMERICAN WELDQUIP** Robo-Quip RQ-5000 Nozzle Cleaning Station has all the advanced features and benefits you are looking for in a robust and durable robotic nozzle cleaning station.

The Robo-Quip optimizes all the advanced features in a clean, simple design. It is uncomplicated and does not utilize expensive PC boards or other parts found in competitive brands. All the while, offering the same advanced features such as Ethernet and DeviceNet capabilities.

See Catalog Sheet CAT010 for more information