

300/500 AMP QUICK CHANGE SOLID MOUNT 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.

The American Weldquip Quick Change Air-Cooled Offset Arm Solid Mount Robotic System has all the durability and advanced features as our standard robotic torch systems. Plus, the Quick Change system offers you additional advantages. Designed for robotic systems with integrated software crash protection.

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

QUICK CHANGE UNICABLE ASSEMBLY - The fast change-out uncable design extends easy and quick serviceability if the uncable ever has to be replaced.

INTEGRATED SOLID TORCH MOUNT - The American Weldquip solid mount arm features our unique "TCP Locating Flat". Plus, all the electrical connections securing the cable assembly and gooseneck are an integral part of the arm. This feature offers you a lower cost alternative when replacing cables and gooseneck thus further lowering your maintenance cost and total cost of ownership.

QUICK CHANGE GOOSENECK - The Quick Change gooseneck design offers fast removal if the need arises for a gooseneck replacement. American Weldquip goosenecks are still the most rugged in the industry.

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 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. The power cable features a Hytrel® core tube for increased cable strength and support springs at both the front and rear to prevent feedability problems and relieve cable strain. A heavy duty factory crimped cable end fittings ensures a secure, positive electrical connection, producing less electrical resistance and less heat.

UNIQUE LOCATING FLAT - All American Weldquip robotic torches and mounting arms incorporate a unique locating/positioning flat guaranteeing repeatable and accurate TCP positioning when changing out components.

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



- **QUICK CHANGEOUT CABLE ASSEMBLY** – Provides fast replacement of the cable assembly if required.
- **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™.
- **INTEGRATED SOLID TORCH MOUNT** – All the electrical connections securing the cable assembly and gooseneck are an integral part of the arm. This feature allows for quick change out of the power cable assembly and gooseneck helping to reduce downtime. CNC machined from solid aluminum bar stock guarantees accuracy and superior rigidity. Will not bend or break. Securely mounts to the insulating disk.
- **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 QUICK CHANGE 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
- **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.



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



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. See Catalog Sheet CAT009 for more information

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 | | | | | | | | |
| 300 | 300A Air-Cooled | 300A | 275A | 350A | 300A | .035" (1.2mm) M6 | 75035511 | 75002007 | 9/16" (15.1mm) | 75135601-I | 75001003 | 750XX222T | SPECIFY |
| 500 | 500A Air-Cooled | 500A | 400A | 550A | 500A | .045" (1.2mm) M8 | 75045014 | 75004033 | 5/8" (15.9mm) | 75146202 | 75001004 | 750XX228T | SPECIFY |

HOW TO ORDER

** Individual components must be ordered to complete the solid mount system. Select and order individual components listed below - solid mount arm, insulating disk, gooseneck and power cable.

| ITEM # | PART NUMBER | DESCRIPTION |
|--------|-------------|--|
| 1 | SM-1000-22 | SOLID MOUNT MAIN ARM ASSEMBLY for 22 DEGREE ** |
| | SM-1000-45 | SOLID MOUNT MAIN ARM ASSEMBLY for 45 DEGREE ** |
| 2 | | INSULATING DISK |
| | AS-300M-SM | FANUC - S-5, JR55, SR510, S5, KUKA - KR-6, KR-15, PANASONIC - AW-005A, AW-500C, AW-500CL, AW-006A, AW010A, AW-8010, VR-005C, VR-006ALI, VR-006A, VR-006AL, VR-008A |
| | AS-400M-SM | ABB- IRB6, 1400, 1500, 2000, FANUC - ARCMATE 100, 100L, 120L, S-6, MOTOMAN- MH50-20, HP50-20, SK6, SK16, SK20, OTC - MRV-6, EXV6, EX-V6I, EX-V16, DR4000, DR4200, DR4400 |
| 3 | | GOOSENECK |
| | AST-322-H | 300 SERIES - 22 DEGREE |
| | AST-345-H | 300 SERIES - 45 DEGREE |
| | AST-522-H | 500 SERIES - 22 DEGREE |
| | AST-545-H | 500 SERIES - 45 DEGREE |
| 4 | | POWER CABLE SELECTION** |
| | SM-03500PC | 3' (.914m) Power Cable |
| | SM-04500PC | 4' (.914m) Power Cable |
| | SM-05500PC | 5' (.914m) Power Cable |
| | SM-06500PC | 6' (.914m) Power Cable |
| | SM-08500PC | 8' (.914m) Power Cable |

** ADD OPTIONS SUFFIX DESIGNATION TO END OF THE SOLID MOUNT MAIN ARM ASSEMBLY PART NUMBER. i.e. SM-1000AS for AIR BLAST.

** FOR FEEDER PIN SELECTION ADD DESIGNATION TO END OF CABLE PART NUMBER. i.e. SM-04500PCM FOR MILLER POWER PIN.

| OPTIONS | |
|---------|-------------------------|
| SUFFIX | DESCRIPTION |
| AS | Air Blast |
| RS | Replaceable Nozzle Seat |
| TS | Nozzle Touch Sensing |
| VS | Voltage Sensing |

| FEEDER PIN SELECTION | |
|----------------------|----------------------|
| B | EURO |
| D | DAIHEN/OTC |
| DP | DAIHEN/OTC DP SERIES |
| F | FRONIUS |
| L | LINCOLN |
| LU | LINCOLN UNIVERSAL |
| M | MILLER |
| P | PANASONIC |
| T | T#4 PIN |
| TS | T#5 Pin |

