

# Installing an Orbitally-Welded Hygienic Piping System

## Application:

- Pharmaceutical piping systems

## Material:

- 0.5", 0.5" to 1.0" & 2" OD (12,7 mm, 12,7 mm to 25,4 mm & 50,8 mm OD) seamless 316L stainless steel tubes

## Welding Equipment:

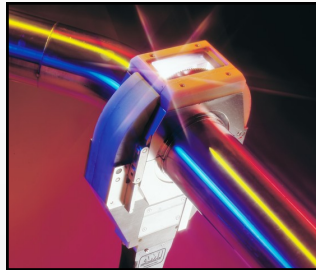
### *Weld Heads:*

- Model 9CT-750
- Model 9-2500
- Model 9-750

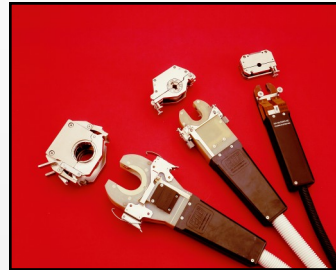
## Benefits:

- ✓ 0.2% rejection rate
- ✓ High corrosion resistance
- ✓ Smooth weld beam

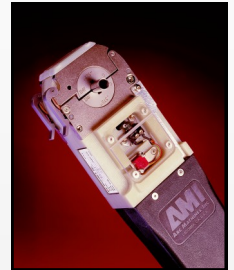
For further information, call AMI at 1-818-896-9556 or e-mail [sales@arcmachines.com](mailto:sales@arcmachines.com)



Model 9 Series



Model 9CT-750



Model 9-750

Pharmaceutical manufacturers are under pressure to produce products safely, at reduced costs and to higher quality standards than in the past. Innovative system design and new manufacturing technologies will certainly play an important role in accomplishing these goals. Yet it is important to determine the cost-benefit ratio of new technologies to avoid inflating the costs without achieving the desired effects.

Orbital welding has become the standard method of joining piping systems for biotech and pharmaceutical processes in the USA, but in Europe it has been less readily adopted. A leading contractor in the USA has made more than 100,000 orbital welds in critical pharmaceutical piping systems and through continuous improvements of its standard operating procedures (SOPs) has reduced the reject rates of orbital welds to approximately 0.2%. Rework adds greatly to the expense of pharmaceutical installations. Clearly, it is cost-effective to do it right the first time. The quality of orbital welds also facilitates CIP/SIP (clean-in-place/steam-in-place) operations. Smooth weld beads make cleaning more effective and may allow for longer intervals between cleaning and longer production runs, leading to higher profits.

Considerable evidence suggests that orbital welding, particularly in combination with high-purity purging, results in better corrosion resistance of the piping systems. The combination of more advanced design concepts and orbital welding technology can help pharmaceutical companies to build better and more cost effective manufacturing facilities.

To read the full story, visit [www.arcmachines.com](http://www.arcmachines.com)



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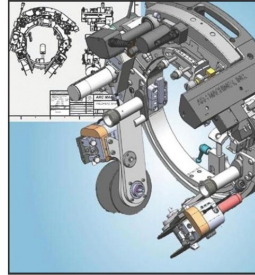
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# AMI

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### M9 Series Weld Heads

### QUICK SPECS

#### OD Range

0.093" to 7.500"  
(2,362 mm - 190,500 mm)

#### Travel Motor

D.C., P.M., D.C. Tachometer

#### Head Weight

11 lbs. - 35 lbs.  
(4,9 kg - 15,9 kg)

#### Electrode Size

0.040", 1/16", 3/32"  
(1 mm, 1,6 mm, 2,3 mm)

#### Rotor RPM

0.1 - 20

#### Cable Length

25 ft. (7,6 m) when connected to adapter cable  
(extensions available)



Removable tube clamps



Pre-plumbed for water-cooling



Compatible with all AMI Power Supplies

### M9CT Series Weld Heads

#### OD Range

0.093" to 1.500"  
(2,362 mm - 38,100 mm)

#### Travel Motor

D.C., P.M., D.C. Tachometer

#### Head Weight

6 lbs. - 10 lbs.  
(2,7 kg - 4,5 kg)

#### Electrode Size

0.040", 1/16", 3/32"  
(1 mm, 1,6 mm, 2,3 mm)

#### Rotor RPM

0.1 - 20

#### Cable Length

25 ft. (7,6 m) when connected to adapter cable. (extensions available)



Removable tube clamps



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