

Orbital Pipe Welding on Fire Water System

Application:

- Firewater system

Material:

- Copper-nickel pipe in all sizes up to 10"

Welding Equipment:

Power Supply:

- Model 215

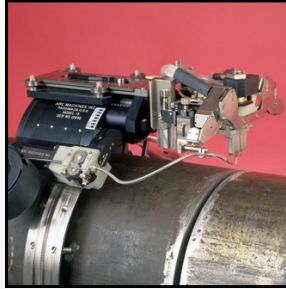
Weld Head:

- Model 15

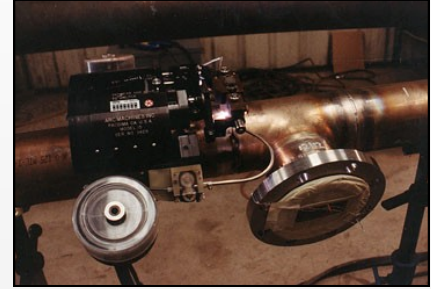
Benefits:

- ✓ 50 diameter in. per shift vs. 22 diameter in. with manual welding
- ✓ High quality weld
- ✓ Reduced reject rate by 67%

For further information, call AMI at 1-818-896-9556 or e-mail sales@arcmachines.com



Model 15



When Harmony Construction replaced the firewater system on the Hondo Platform, off the coast of Southern California operated by Exxon USA, they decided to use copper-nickel pipe which provides superior corrosion resistance in a marine environment. The project required 9,000 ft. of pipe of all sizes up to 10" and needed 3,140 welds. Orbital welding was chosen as the joining method for most of the butt welds.

After the careful evaluation of weld methods and equipment, a **Model 215** micro-processor-controlled power supply and a **Model 15** weld head from Arc Machines, Inc. was selected. Six days were spent training skilled manual welders on the use of the orbital equipment.

After 30 days the average machine operators reached 40–50 diameter in. per shift while manual operators completed 22 diameter per shift. To maximize efficiency, two welders working together with the orbital welding equipment (one forging and prepping and one welding) showed greater productivity than any of the four manual welders.

The use of orbital welding on copper-nickel pipe dramatically reduced the reject rate compared to manual welding. An on-site inspector reviewed the x-rays of the finished welded assemblies and visually inspected the welds. The reject rate on the orbital welds was about 5%, compared with 15% rejections of the manual welding. This installation demonstrates the successful partnering between the consumer, the contractor, and the equipment supplier.

To read the full story, visit www.arcmachines.com



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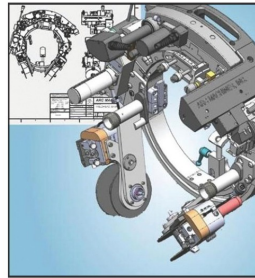
LEADERS & INNOVATORS in Automated Orbital Welding



Cutting Edge Narrow-Groove
Pipe Welding Technology



Advanced Fusion Welding
and Process Control



High-Tech Designs &
Engineering Services



Turnkey Integrated Systems

Advanced Products, Systems & Solutions



With over 3000 customer relationships in over 50 countries, Arc Machines, Inc. has set the standard for Automated Orbital Welding Equipment for over 30 years, combining Quality and Durability with Innovative Engineering and Design.

Around the world, leading manufacturers and contractors rely on AMI for their expertise in automated orbital welding and to develop customized solutions for new welding challenges.

www.arcmachines.com

AMI

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M227 Power Supply

QUICK STATS



In place of the M215 Power Supply!

Input Power

100 to 240 VAC,
single-phase
50/60 Hz

Weld Current

3 to 100 A DC @ 100/120 VAC
input, 3 to 225 A DC @
200/240 VAC input, 100% Duty Cycle

Memory Capacity

100 weld schedules maximum,
100 levels per schedule maximum,
100 different passes per level

I/O Device

M-227EMM

Water Cooler

Optional

Dimensions

15" x 23" x 20"
(381 mm x 584 mm x 508 mm)

Weight

88 lbs.
(40 kg)



M15 Weld Head

AVC Stroke

1.75" (44,45 mm)

Torch Oscillation Stroke

2" (50,8 mm)

Wire Feed Speed

5 to 200 IPM

Radial Clearance Range

3.69" (93,73 mm) (minimum)
depends on pipe diameter,
torch type and configuration

Axial Clearance Range

11.5" (292,1 mm) (minimum)
depends on torch type and options

- Single or dual wire feeder options are available
- Several torch types are available

