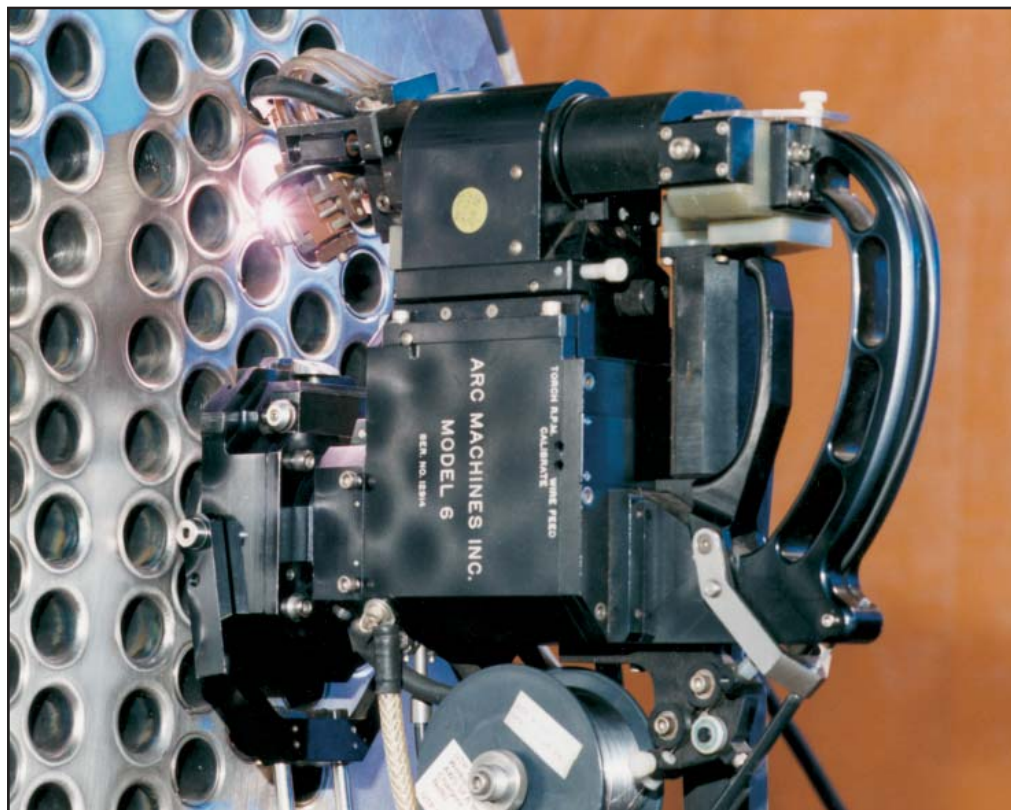




**ARC MACHINES, INC.** *The widest range of orbital welding equipment in the world*

## MODEL 6 TUBE-TO-TUBESHEET WELD HEAD



- Rugged, reliable tube-to-tubesheet weld head with 200 amp torch
- Welds projected, flush or recessed tubes with filler wire, or flush joints fusion-only
- Unlimited torch rotation
- Multiple-pass welds without stopping
- Self-supporting on tubesheet
- Welds in any position, including overhead
- Air-operated “fixtures” speed up production
- Compatible with Arc Machines’ Model 215, 227 or 415 power supplies

**ARC MACHINES, INC.**

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# MODEL 6 TUBE-TO-TUBESHEET WELD HEAD

The Arc Machines' Model 6 is a rugged, field-proven weld head for high-production welding of tube-to-tubesheet using the GTAW process.

The Model 6 has exceptionally fast mount and dismount times for ease of operation and productivity. The torch is positioned on the tube to be welded by a pneumatically operated locating fixture. With the touch of a button, the locating fixture precisely locates itself over the tube to be welded. The "C" and "D" torches (for fillet welds) are spring-loaded torches with a chill follower. The chill follower is located on the inside of the tube to be welded and contacts the tube wall exactly opposite the electrode, thus minimizing the possibility of burn-through on thin-wall tubes. The mechanics of the spring-loaded torch allows it to perfectly track the shape of the tube regardless of minor ovality.

## The Arc Machines Model 6 Offers:

- Servo-controlled AVC, rotation and synchronized wire feed
- Servo-controlled AVC
- Water-cooled torches
- Assortment of torches for recessed, projected or flush tubes
- Adjustable torch tilt
- Automatically sets distance between electrode and tubesheet before arc initiation
- Non-linear vertical tungsten travel prevents tube-end burn-off
- Pulsed-current welding and synchronized pulsed-wire feed
- Compatible with Arc Machines' Model 215, 227, or 415 power supplies



Photo Courtesy of Verolme Machinefabriek IJsselmonde b.v.

## The Model 6 can be equipped with several torches:

- "C" Torch - for fillet welding of projected tubes
- "D" Torch - for fillet welding of projected tubes with minimum spacing between tubes
- "E" Torch - for welding flush or recessed tubes
- Gas chamber for welding titanium available



"C" Torch

## Technical Data

Process:	GTAW (TIG)	Wire Manipulator (Manual Adj.):	Vertical, Horizontal and Angular
Weld Current:	200 ADC (maximum)	Filler Wire:	0.030" recommended (0,8mm Ø)
Arc Voltage Control:	Automatic	Wire Spool:	2 lb., 4" standard spool (1 kg, 100mm)
Rotation Speed:	0.1 to 10.0 RPM	Weight:	16 lbs. (7,3 kg) less cables
Wire Feed Speed:	5 to 100 IPM (13 to 254 cm/min.)	Outline Drawing No.:	40060014, 40060015, 40060016, 40060110, 40060113, 40060109
Torches - "C", "D", and "E":	Water-cooled, 200 ADC 100% duty cycle	Applicable Specification:	Spec. No.: 6
Tungsten Size:	1/16" or 3/32" (1,6 or 2,4 mm Ø)		

**ARC MACHINES, INC.**