MODEL 307
TUBE WELDER POWER SUPPLY

Shown with attached cooling unit

Arc Machines Model 307 is the most advanced orbital tube welding power supply of its type in the world. It is economical, easy to use, packed with useful features, and compatible with all new and existing in-the-field AMI fusion weld heads, as well as some heads featuring wire feed. The software is Windows based, making it compatible with PCs, and available in multiple languages. A large color touch screen makes data entry easy and convenient. The floppy drive and USB port facilitate simple and convenient storage of weld schedules and project data. Among the many useful features are auto weld and tack-weld program development, programming by time and/or position, multiple weld schedule libraries, weld data recording, graphical user interface and on-screen help.

Key features include:

- Automatic weld schedule generation (including tacking)
- Three weld counters
- Customizable reports
- On-the-fly weld schedule modification
- Built-in 3.5" floppy drive
- Rotation programming by time or degrees
- Graphical user interface
- Weld data logging
- Project management software

- Multiple weld schedule libraries
- Password protected log-on
- Multiple language capability
- Available weld I.D. label printer
- On-screen help
- USB port (for use with a mouse, keyboard, printer, external memory device, etc.)
- Built-in high-speed printer
- Encoder-feedback servo controls
- Real-time digital data acquisition

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AMI is an ISO Certified Company

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The **Home** screen provides direct access to all primary functions. Owners may set up the unit to allow unlimited access to all users or require a logon name and password. Each logon name is classified as an operator, supervisor or programmer, with each classification designed to allow or limit varying degrees of control or input. Note: The upper right corner of the screen indicates who is logged on as well as their access category.
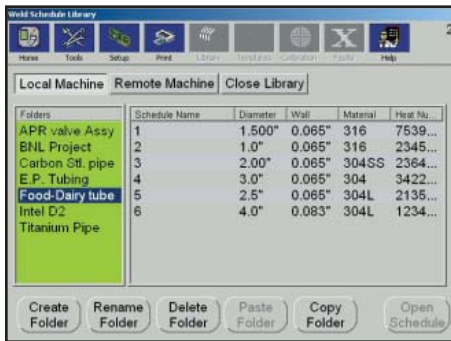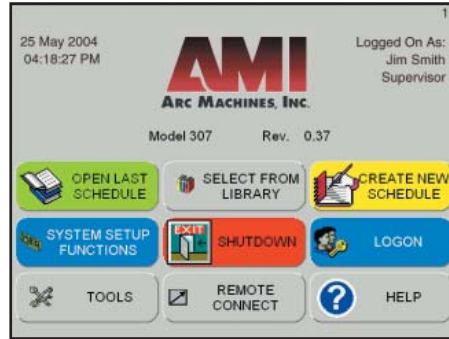
The **307 Library** will store weld schedules in multiple folders. These folders may be categorized by tube or pipe size, material, job, project, operator name or any other appropriate category. To access these schedules, simply open the library, select a folder and select the appropriate weld schedule.

Automatic procedure generation will create a weld schedule based on the weld head used, the tube or pipe size and wall thickness. Operators may select from three modes. "Continuous" (travel) for most thin-wall applications, "Step" (travel) for heavy-wall applications, such as schedule 10 or 40 pipe, and "Tack," which allows selection of the number of tacks, the depth of penetration and sequence in which the tacks are made.
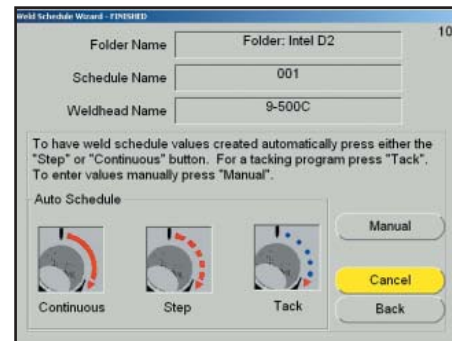
Weld records may be searched by weld I.D. numbers, date, project name, weld schedule name, folder name, operator name, or any combination of these categories. The records may then be exported to the built-in floppy drive or to the USB port for downloading directly to any USB storage device or via cable or wireless to a PC.

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For jobs that require **static information recording** and/or *****real-time weld data recording**, the 307 is unmatched. For starters, each weld may be assigned a weld I.D. number. In addition to providing output signals of streaming data of amps, travel speed, arc volts, level time and wire feed rate (if used with a wire feed weld head) you may record a variety of information called Associated Data. This data is broken down into six categories: tube, equipment, gas, electrode, wire (for wire feed type applications) and a comments field. Discrete fields containing this data make it easy to record all of the pertinent details of your job.
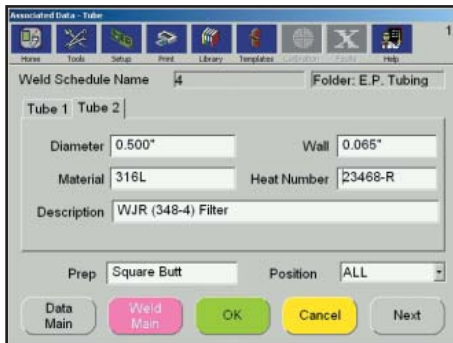
Tube info screens provide discrete fields for recording all details associated with the two components to be welded, including size, wall thickness, material, heat number and description. Dedicated fields to record prep and weld position are also provided.

Modify the weld schedule on-the-fly. Values of amps, pulse rate, travel speed, and wire feed rate may be instantly raised or lowered at the touch of a button. At the end of the weld you will be able to "save" all changes.

A **Linear or Radial Graph** may be generated to clearly display level position, amps, arc volts, travel speed and wire feed rate.

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Software Features

- Auto weld schedule generation (including tacking)
- Three weld counters
- Customizable reports
- On-screen help
- English/metric converters
- Welding function calculators
- Multiple in-sequence display selection
- Auto rotation calibration
- Multiple weld schedule libraries

- Password protected logon
- Multiple language capability
- On-the-fly weld schedule modification
- Graphical user interface
- Rotation programming by time and/or degrees
- Weld data logging
- Project management software
- Simplified weld records search
- Real-time digital data acquisition

Available Accessories

- Remote operator's pendant
- Weld head and pendant extension cables
- Weld identifier label printer

- Water cooling unit
- Reusable shipping case
- Manual TIG torch and foot control

Technical Data

Welding Process:	GTAW (TIG)
Arc Start System:	Injection Pulse Start
Current Pulse Rate:	0.05 to 50 PPS
Overrides:	Current, RPM, Wire, Pulse Rate ± 100%
Input Power:	115 – 240 VAC ± 10% single phase, 50/60 Hz. (auto-switching)
Output Power:	3 – 200 amps, ± 0.5%
Duty Cycle:	100% @ 150 amps
Memory Capacity	20 GB
I/O Devices:	3.5" floppy & USB (1.1)

Multi-Level Functions:	Primary amps Background amps Primary RPM Background RPM Primary pulse rate Background pulse rate Primary wire feed rate Background wire feed rate Current mode (constant or pulsed) Travel mode (continuous, step or off) Wire mode (continuous, pulsed or off)
Dimensions:	Height: 15.75" (40 cm) Width: 11.50" (29 cm) Length: 25.25" (64 cm)
Weight:	62 lbs., (28 Kg)

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