

MODEL 415

PROGRAMMABLE MULTI-FUNCTION WELD POWER SUPPLY

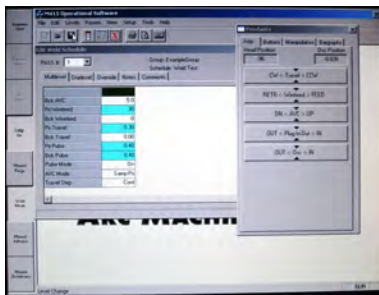
AMI

ARC MACHINES, INC.®

State-of-the-Art Technology with Unparalleled Flexibility and Capability



The Model 415 is an all-in-one computer controlled GTAW power supply. It is primarily designed to work with AMI's orbital and fixed automation weld heads. The Model 415 power supply can control third party positioners and welding manipulators.



M415 Program Execution Screen

The Model 415 incorporates a powerful automation controller designed to meet the challenges of the most demanding welding applications. At the heart of the power supply is an industrial computer programmed via a large 12" touch screen or keyboard. The intuitive graphical user interface (GUI) makes programming easy using standard welding industry terminology and clearly organized input fields.

QUICK SPECS

Input Power

200 - 575 VAC
Service, 3-phase
50/60 Hz

Weld Current

5 - 400 A
100% Duty Cycle

I/O Devices

2 USB ports
RS232 serial interface
Data acquisition output
Ethernet over fiber optic

Memory Capacity

Over 1000 weld programs

Water Cooler

Included

Weight

710 lbs. (325 kg)

Dimensions

39" x 26" x 36" (990 mm x 660 mm x 915 mm)



www.arcmachines.com

sales@arcmachines.com

MODEL 415 PROGRAMMABLE MULTI-FUNCTION WELD POWER SUPPLY

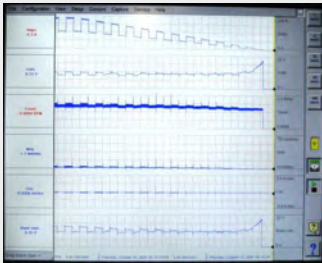
STANDARD HARDWARE

The Model 415 power supply has many standard hardware and software features. The power supply contains all the hardware and control elements of a welding automation cell in a highly integrated compact package. It can easily be switched between orbital and fixed automation applications.



- Computer controlled, solid state, pulsed, and air cooled GTAW inverter
- 12" touch screen graphical user interface (GUI) to display all weld data
- High capacity, programmable memory for storage of weld schedule information
- Current servo plus 4 Standard Closed Loop velocity servos
- 2 programmable auxiliary outputs for Hot Wire and travel control
- Integrated water cooler for welding torch and weld head cooling
- 2 USB and 1 Ethernet ports
- Full function remote pendant
- HF or Lift Start arc initiation
- Data streaming output via RS232
- Parallel printer connector
- Compact size keyboard

OPTIONAL HARDWARE



Data Acquisition Module

- 4 closed loop motor servos
- 8 open loop motor drives for positioning and job functions
- High resolution, digital remote vision systems
- Auxiliary water cooler for cameras
- Digital data acquisition module or chart recorder
- Remote control PC interface via Ethernet LAN

PROGRAMMABLE FUNCTIONS



Welding Current Control



Arc Voltage Control (AVC)



Wire Feed



Rotation/Travel Control



Hot Wire Voltage Control



Oscillation

OPTIONAL FUNCTIONS



Motorized Wire Manipulator

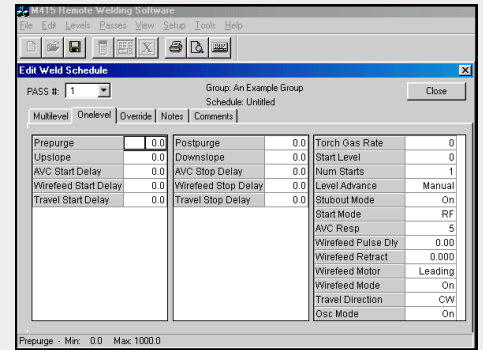


Camera Illumination

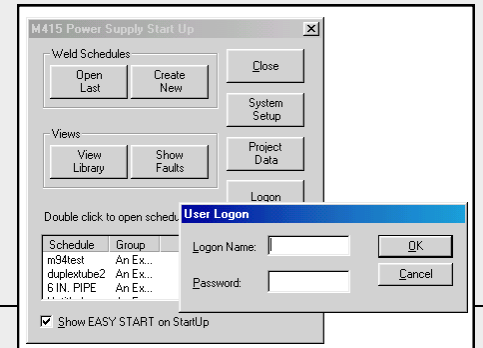
MODEL 415 PROGRAMMABLE MULTI-FUNCTION WELD POWER SUPPLY

STANDARD SOFTWARE

- Single or multipass welding schedule programming
- Up to 100 levels in one pass and up to 100 individual passes
- Pulsed current, travel, wire feed, oscillation, and wire manipulator synchronization
- Stepped or spiral travel programming
- Level programming in time or distance
- Data acquisition output
- Pre-programmed library of weld head definitions to reduce calibration and setup times
- User-modifiable programming field descriptions
- Multi-level password protection
- Project data recording
- Bar graph presentation of real-time welding parameters
- Foreign language software versions
- 2 User programmable fault I/Os



One Level Edit Screen



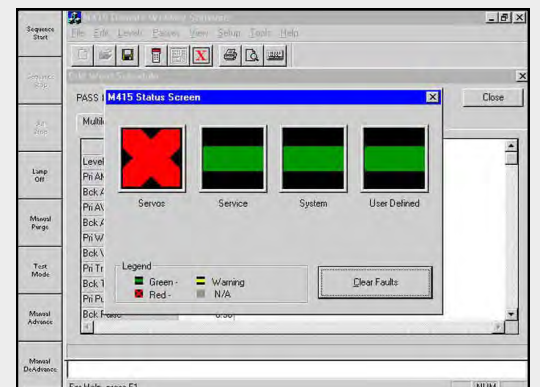
Start Up Screen

OPTIONAL SOFTWARE

- Remote operation and offline programming via a network

SENSORS & FAULT MONITORS

- Torch Gas Flow Sensor - an analog flow sensor that monitors gas flow rate (CFH)
- Coolant Flow Sensors - monitor coolant flow rate and create a Sequence Stop if below 0.2 GPM
- Coolant Level Sensor - senses coolant level in reservoir and displays to the operator if the level is low
- Over Temperature Sensors - located in critical assemblies, will create ALL STOP conditions if certain assemblies get too hot
- Ground Fault - prevents Sequence Start or creates an ALL STOP condition if the work piece ground is not connected



System Status Screen

MODEL 415 PROGRAMMABLE MULTI-FUNCTION WELD POWER SUPPLY

WHAT'S INCLUDED

M415 Package

1. M415 remote pendant with 15 ft. cable (4,5m)
2. Pendant cable extension - 50 ft. (15m)
3. Ground cable with 400A ground clamp - 50 ft. (15m)
4. Weld head control cable - 40 ft. (12m)
5. Weld head services cable - 40 ft. (12m)
6. 10 ft. shielding gas hose
7. Input power cable, 25 ft. (7,6m)
8. Keyboard
9. Heavy-duty, reusable shipping crate
10. Software package and operator manual

COMPLEMENTARY PRODUCTS



Remote Vision System



Chart Recorder



Remote PC

WELD HEADS



Model 2



Model 43



Model 52
Heavy-Duty Pipe Weld Head

*Leaders & Innovators in
Automated Orbital Welding*

*For further information please visit our website
or contact us at 1-818-896-9556*



AMI
ARC MACHINES, INC.®

www.arcmachines.com

sales@arcmachines.com

HEADQUARTERS
Arc Machines, Inc.

10500 Orbital Way
Pacoima, CA 91331 U.S.A.
Tel: +1 / 818 / 896 / 9556
Fax: +1 / 818 / 890 / 3724
sales@arcmachines.com

EUROPEAN BRANCH OFFICE
Arc Machines, Inc.

Chemin du Lavasson 2, CH-1196
Gland, Switzerland
Tel: +41 / 22 / 995 / 0051
Fax: +41 / 22 / 995 / 0059
sales@arcmachines.ch

GERMAN OFFICE
Arc Machines GmbH

Markelsbach 2
D-53804 Much, Germany
Tel: +49 / 2245 / 91680
Fax: +49 / 2245 / 916868
sales@arcmachines.de

UK OFFICE

Arc Machines UK Limited
Unit 2 Lamport Court
Heartlands Business Park
Daventry, NN11 8UF, UK
Tel: +44 / 1327 / 312787
Fax: +44 / 1327 / 315034
sales@arcmachines.co.uk