

# MODEL 415 WDR

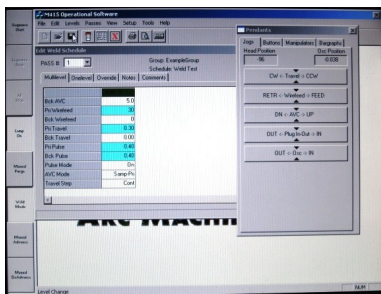
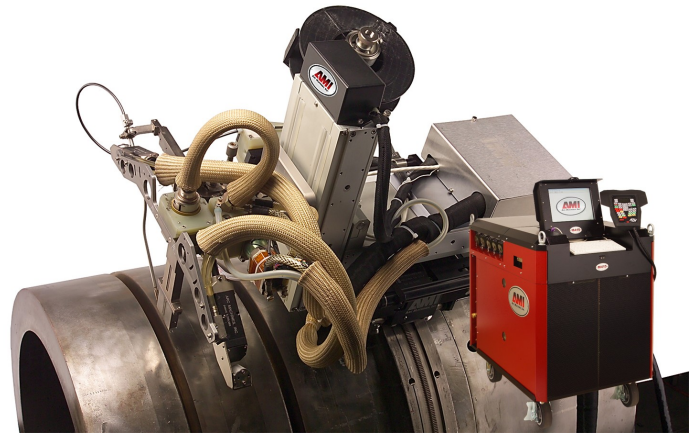


## PROGRAMMABLE MULTI-FUNCTION WELD POWER SUPPLY

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



The Model 415 WDR 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 WDR power supply can control third party positioners and welding manipulators.



M415 WDR Program Execution Screen

The Model 415 WDR incorporates a powerful automation controller designed to meet the challenges of the most demanding welding applications. The Model 415 WDR is operated by 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 - 400A  
100% Duty Cycle

#### I/O Devices

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

#### Memory Capacity

1000+ weld programs

#### Water Cooler

Included

#### Weight

710 lbs. (325 kg)

#### WDR (Weld Data Recording)

Standard; recording and saving of weld data; exporting to a storage device in native or other formats; saving weld project data records as a single file.

#### Dimensions

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



[www.arcmachines.com](http://www.arcmachines.com)

[www.theglobalweldingcompany.com](http://www.theglobalweldingcompany.com)

# MODEL 415 WDR PROGRAMMABLE MULTI-FUNCTION WELD POWER SUPPLY

## STANDARD HARDWARE

The Model 415 WDR 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

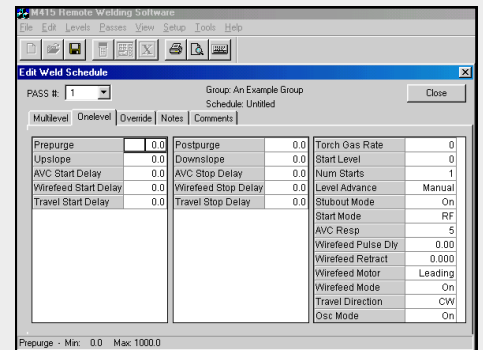


Camera Illumination

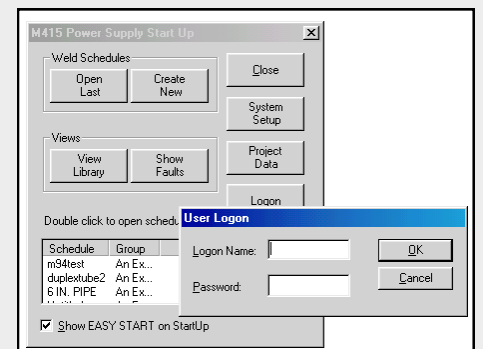
# MODEL 415 WDR PROGRAMMABLE MULTI-FUNCTION WELD POWER SUPPLY

## 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
- Bar graph presentation of real-time welding parameters
- Foreign language software versions
- 2 User programmable fault I/Os
- Weld Data Recording (WDR): recording and saving of weld data; exporting to a storage device in native or other formats; saving weld project data records as a single file



One Level Edit Screen



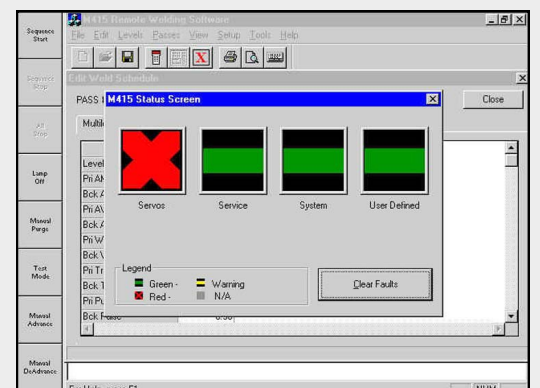
Start Up Screen

## 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 WDR PROGRAMMABLE MULTI-FUNCTION WELD POWER SUPPLY

## WHAT'S INCLUDED

### M415 WDR Package

1. M415 WDR remote pendant with 20 ft. cable (6m)
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. (3m) 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

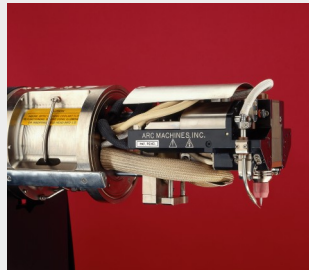


Remote PC

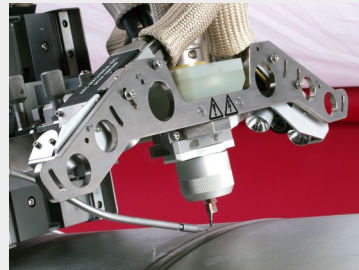
## WELD HEADS



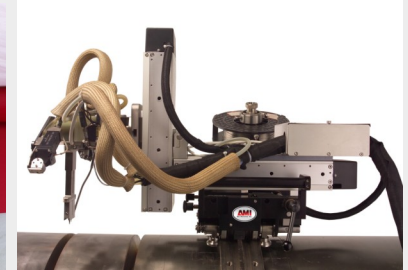
Model 2  
Modular Welding System



Model 43  
ID Pipe Weld Head



Model 52  
Heavy-Duty Pipe Weld Head



Model 62  
Configurable Pipe Weld Head

## The Global Welding Company

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



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[www.arcmachines.com](http://www.arcmachines.com)

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### 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](mailto:sales@arcmachines.com)

### SOUTHWEST OFFICE

Arc Machines, Inc.

10650 Haddington Drive  
Houston, TX 77043 U.S.A.  
Tel: +1 / 818 / 896 / 9556  
Fax: +1 / 818 / 890 / 3724  
[sales@arcmachines.com](mailto:sales@arcmachines.com)

### GERMAN OFFICE

Arc Machines GmbH

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

### UK OFFICE

Arc Machines UK Limited

11 Low March  
Daventry, NN11 4SD, UK  
Tel: +44 / 1327 / 879606  
Fax: +44 / 1327 / 315034  
[sales@arcmachines.co.uk](mailto:sales@arcmachines.co.uk)

### INDIA OFFICE

AMI India Pvt. Ltd.

G O Square, "B" Building,  
1st Floor, Aundh - Hinjewadi  
Road, Wakad  
Pune - 411033 MH, India  
Tel: +91 / 90110 / 24331  
[sales@arcmachines.com](mailto:sales@arcmachines.com)