

Model 501

HOT WIRE WELDING POWER SUPPLY



THE WIDEST RANGE OF ORBITAL WELDING EQUIPMENT IN THE WORLD

The Model 501 Hot Wire Power Supply is designed to increase the deposition rate of the filler wire in the weld joint by resistively preheating it.

The increased deposition rate is achieved by pre heating the wire close to its melting point before its introduction into the weld puddle. The higher deposition rate leads to increased productivity in welding and cladding operations. Moreover, by preheating the wire before introducing it in the puddle, all moisture from the wire surface is removed, which leads to an improved weld quality.

The Hot Wire TIG welding process can provide deposition rates that are competitive with the MIG process, and produce superior quality weldments.

INDUSTRY

- Narrow gap ID welding
- Nuclear valve repairs
- Remote controlled ID cladding, welding and repair
- Vessel manufacturing



**MODEL 2 WELD HEAD
WITH HOT WIRE TORCH
AND WIRE FEEDER**

FEATURES

The Model 501 is a high-precision power supply using advanced technology to increase welding productivity. To minimize magnetic interference, the Model 501 uses AC current to preheat the wire. This current is far more precise than competitive machines, being very close to a true sine wave. As an option the Model 501 can be ordered with a DC current output module.

- Constant Voltage (CV) True RMS mode-of-operation
- Calibrated Precision Closed-Loop Servo Output Control
- Voltage Feedback Sensing at the wire feed tip or internal to the Power Supply
- True RMS instrumentation Outputs (Amps and Volts)
- Optional Remote Programming Pendant
- Control input for connection to an external controller



**MODEL 501 HOT WIRE
POWER SUPPLY**

Visit arcmachines.com for more information.

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MODEL 501 HOT WIRE REMOTE PENDANT

The Model 501 remote pendant is designed to allow the operator to control the hot wire output of the Model 501 hot wire power supply. The operator can set the desired output voltage via the thumbwheel potentiometer on the pendant, from 0.0 to 20.0 volts. When the operator flips the toggle switch, the output goes active.

During welding the operator can change the output voltage using the thumbwheel. When the output is active, the two LED bargraphs illuminate to indicate the actual output current and output voltage being measured. The Model 501 hot wire power supply has only one remote control connector.

So if the M501-RP is connected, the M501 power supply cannot be remotely controlled by another device, like the M415 power supply for example.

FEATURES

- Designed to interface to and control the Model 501 hot wire power supply
- Includes 25 ft / 6 M cable w/ strain relief
- Steel Enclosure with handle
- LED bar display for hot wire AC current feedback
- LED bar display for hot wire AC voltage feedback
- Thumbwheel Potentiometer to set desired hot wire voltage setting
- Toggle switch to activate or de-active hot wire output voltage
- Ability to override hot wire voltage during welding
- Useful tool when calibrating hot wire power supply output voltage
- Useful tool when trouble shooting Model 501 hot wire power supply


Hot Wire remote pendant is an optional accessory and must be purchased separately when purchasing the Model 501 hot wire power supply.

- Weight w/ 25 ft cable: 6.5 lbs (3 kg)

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QUICK SPECS	
Input Power	200 - 240 VAC 25 A, 1Ø
Output Current	250A (AC) @ 100% Duty Cycle (DC Output Module optional)
Open Circuit Voltage	16V
Output Voltage	0 - 10V
Loop Response	1.2 sec
Weight	135 lbs. (61.5 kg)
Dimensions	23" x 19" x 9.5" (585 mm x 485 mm x 240 mm)

MODES OF OPERATION	
<p>The Model 501 Hot Wire Power Supply can be used:</p> <ul style="list-style-type: none"> • as a stand-alone unit with its own Operator Pendant • with the AMI Model 415 WDR Power Supply/Controller • by an external weld process controller 	<p>THE AMI MODEL 415 WDR, 400 A DC POWER SUPPLY/CONTROLLER</p> 

A versatile hot wire welding automation system may be created by equipping an AMI Model 2 weld head with a hot wire torch, AVC, Oscillator, optional Active-Filter Vision System, and the AMI Model 415 WDR Power Supply. This combination can be used for high-quality, high-productivity applications, such as narrow groove welding and cladding.



ACCESSORIES	
<ul style="list-style-type: none"> • Remote Operator's Pendant • Wire feeder • Vision system • DC output module (optional, not shown) • Current monitoring (not shown) 	  



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