



100% Made In The U.S.A.

## Demand Pulse Multi-Process Power Supplies

**MV300DPM-III, MV445DPM-III, MV550DPM-III**



**The best welders on the market, and you have never heard of them! There is NO equal.**

Our welders are not the run of the mill, they are hand crafted to perfection at our manufacturing facility here in the United States of America, and they are made with a great deal of pride.

Unlike other welders ours are made for Industrial use, they are tough, rugged and can take the abuse that they are bound to get whether it be in a shop, power house, factory, Etc...

They are made from either Black Iron or Stainless Steel if they are black iron we powder coat them for the ultimate protection. Custom colors are available at no extra charge

Our new design allows you full access for cleaning, general maintenance and quick access to reach the multi-Tap board. A heavy duty frame with easy access.



### **Welding with Demand Pulse**

The arc is rarely extinguished. Metal transfers through the arc, a much shorter arc than Pulse Spray... The transfer occurs above the molten pool, so spatter doesn't explode from the puddle... It is a "constant current" process. The operator selects a base current, similar to some GMAW Pulse Spray applications, adjusts the wire feed speed to give the correct voltage, and begins to weld. Lower voltage will cause the puddle to freeze faster. Higher voltage will cause the puddle to be more fluid.

In short arc, a current PULSE is triggered by the short-circuit condition caused by the wire driving into the work piece. Demand Pulse FORCES the transfer to occur BEFORE short-circuit, at a voltage selected by the operator, above the weld pool. This has two important effects: the arc does NOT extinguish and the spatter level is greatly reduced because the molten tip of the wire does NOT contact the weld pool. Because the arc is not extinguished, cold laps are virtually eliminated.

Many reference books describe short arc as a "random Pulse" method of welding, random in the sense that the pulse is triggered as a function of wire feed speed – the faster the wire feed speed the faster the short circuits (Pulses). Demand Pulse is exactly the same, except it **DOES NOT SHORT!**

Weld outside corners on 18-gauge aluminum and stainless steel. Or weld 20-gauge mild steel with .035 wire, or weld beautiful root passes on 4 to 10 inch pipe at 90 amperes with excellent fusion. This bonding has to be due to the arc RARELY being extinguished as it is when Short Arc welding.

And do not overlook HEAVY aluminum. Remember, **Demand Pulse** is a Constant Current MIG process. Most primary aluminum manufacturers recommend constant current for MIG welding aluminum, claiming less porosity and better fusion than when welding with Constant Voltage.

There is nothing that this welder cannot WELD!

***Don't TIG it MIG it, and in a quarter or less of the time, don't believe it? We can prove it!***

### FEATURES

- Digital Meters
- No special programming required
- No special gases required
- Works with any feeder
- Excellent TIG arc
- Less cleanup time and costs
- Optional Lift Arc TIG
- Reduces distortion – weld 22 gauge with .035 wire

Patented **Demand Pulse** offers little to no spatter with lowest heat input in the industry.

AFTEK resistor controls are built using exclusive edge wound wire of a proprietary alloy of iron and aluminum resulting in rust resistance and cooler operation.

**Three-year warranty on power transformers, One-year on rectifiers and resistors!**

## SPECIFICATIONS

MODEL	OPEN CIRCUIT VOLTAGE	ARC VOLTAGE	DC CURRENT RATING	DUTY CYCLE
MV300DPMIII	60 VDC	300A @ 25V	5A – 295A	100%
MV445DPMIII	60 VDC	445A @ 25V	5A – 440A	100%
MV550DPMIII	60 VDC	550A @ 30V	5A – 545A	100%

MODEL	WEIGHT	230V-3PH	460V-3PH	575V-3PH	Hz
MV300DPMIII	425	50A	25A	20A	60
MV445DPMIII	450	90A	38A	30A	60
MV550DPMIII	475	112A	47A	37A	60

### DIMENSIONS

MV300DPMIII – 24" W X 46" D X 32" H

MV450DPMIII – 24" W X 46" D x 36" H

MV550DPMIII – 30" W X 46" D x 46" H

Dimensions include wheels and cylinder holder.

Here's our challenge, send us a sample of what you are welding now, whether it be Tig, Mig or Stick. Let us weld it with our welding machine and return it to you for your inspection. We are so sure our welder will out perform your current welder that we will cover the first \$50.00 of the shipping cost. Give us the opportunity to prove it to you!

Can your welder do this?



Top Left picture: Shows the inside of the exhaust pipe after it has been welded over, No burn through NO bubbles only slight discoloration.

Top Right picture: Shows the outside of the exhaust pipe after it has been welded on, again no burn through and minimal spatter.

Bottom Left picture: Welding the end of a tail pipe using one continuous weld, no stopping and allowing it to cool down and then starting up again.

## CONTACT US

**AFTEK-EHS, LLC**  
555 McFarland Ave, Suite 1  
Rossville, GA 30741  
Phone (706) 861-9396  
Fax (706) 861-6205  
[www.HOTFOILEHS.com](http://www.HOTFOILEHS.com)