

## Tips for using the AFTEK Demand Pulse Series Settings for AFTEK Machines

Recently, AFTEK introduced the DPM-III series, with a third pulse module added to enhance performance with .045 diameter wires.

**When running .045**, the third module is usually set to fire at 15 volts, same as R1. Some prefer to set the pot at 50%, which softens the arc some. *In the past few months, the pots have been changed to switches, labeled high, low, and off.* A year of experimenting showed these settings were optimal for most commercial alloys.

**When running .035**, either turn R2 off, or set to some lower value (50% or less). “Low” on newer versions. AFTEK Demand Pulse MIG is **CONSTANT CURRENT**, so **wire feed speed controls the ARC VOLTAGE**.

**When running “5P”** downhill root passes, turn **BOTH** pulses off, or to minimum. For cap and fill passes, set the selector switch to **“TIG Only”** for smoother arc.

**When running 7018**, stainless or similar electrodes set the selector to **“TIG Only”** for the smoothest arc. This label is being changed to **DPM “On” and “Off”**.

**When running flux-cored wires**, we have many options: small diameter gas-shielded, set like 7018, larger diameters, set like 5P; self shielded wires, set as for MIG. **Remember that wire feed speed is arc voltage.**

**For TIG (GTAW)**, set the amperage desired, turn selector switch to **“TIG Only”**. And switch the ground to the “Positive” side!

Recently, the label was changed on the selector switch to **Demand Pulse ON/OFF**.

Joint Type/Thickness	Wire Size/Type	Background Amps	R1 Setting	WFS (IPM)
Open Butt Pipe (5G)	.035 E-70S6	40-60	High	175-225
Open Butt Pipe (rollout)	.035 E-70S6	60-110	High	200-250
18 Ga. Carbon	.045 E-70S6	15-25	Hi + Hi	100-120
16 Ga. Carbon or SS	.035	30-35	High	150-175
16 Ga. Carbon or SS	.045	30-35	High + Low	150-175
14 Ga. Carbon or SS	.035 E-70S6	35-45	High	150-200
14 Ga. Stainless	.030	40	High	150
12 Ga. Carbon or SS	.035	40-50	High	175-200
10 Ga. Carbon or SS	.035	50-65	High	180-225
1/4" Carbon Steel V-Down	.045 E-70S6	200	Hi + Hi	300
1/4" Carbon Steel Fillet	.045 E-70S6	250	Hi + Hi	360
2" 4140 Valve Base	.045 Cobalt 6M+	75	High + Low	180
.050 Incoloy 600	.035 Inconel 617*	25	High	120

**Demand Pulse is available in several single operator machines – from 300 to 1000 amps, 2 pack, 4 pack, and 8 pack versions. In addition, “GRID” systems are available, in both MV (MIG) and HV (Stick) versions. Up to 300 arcs can be connected to a single secondary circuit (LOOP).**