

Arc Voltage Control

Exact Control of Arc Length

**AP Automation
AVC Systems
combine the latest
technology with
rugged, proven design.**

Used in automated welding applications to regulate arc voltage. The AVC drive compensates for electrode erosion and irregularities in the work-piece. This allows:

- *Minimized setup time*
- *Sound welds on uneven surfaces*
- *Higher-speed welding from your existing equipment*



The torch lowers to make contact with the workpiece.



the tungsten preheats for an adjustable time...



providing a smooth, consistent arc start.

Lift-Start™ Process

AP Automation's new, patented Lift-Start™ option provides an alternative to High Frequency. This process allows reliable, automated, non-HF arc starting on all metals.

Arc Voltage Control Systems are used in these typical industries:

- *Tube and Pipe Mills*
- *Fuel Tanks*
- *Pressure Vessels*
- *Aviation/Aerospace*
- *Multi-pass Pipe Welding*
- *Repetitive TIG or Plasma Manufacturing*



Automation™

1245 30th Street
San Diego, CA 92154

www.ap-automation.com

1-800-770-0063

619-628-1022 Fax: 619-628-1028

AVC-5 Microprocessor-Based Control Unit



The AP Automation AVC-5 system maintains a consistent arc length, resulting in increased travel speeds and high-quality, consistent welds—even on irregular surfaces. The rugged AVC-5 can be used with continuous high-frequency aluminum welding or with all materials requiring start-only HF. It features a microprocessor-based controller: advanced capabilities in a simple-to-operate package. A complete system includes either a standard or compact drive unit with two interface cables.

Features:

- Standard or Lift-Start™ arc starting options
- Deadband Adjustment
- Sensitivity Adjustment
- Adjustable Retract Time
- Voltage Range, 5 - 50 VDC
- Starting Arc Gap, .01 - .09 in.
- Start Delay, 0.1 - 12.0 seconds
- Lockout Switch and Indicator
- Auto Tracking Indicator
- Digital Display
- Manual Up/Down Jog Switch
- Panel/Remote Voltage Preset
- Burn-Through Detection

AVC Drive Units

Standard and 12" Drive Units

The standard and 12" drive units are rugged vertical slides designed to minimize mechanical play and backlash. A stepper motor driving a precision lead screw provides motion. Manual up-and-down jog buttons are conveniently located on the side of the unit.



Compact Drive Unit

The space-efficient C-AVC compact drive unit is limited to a 1" stroke. A stepper motor driving a precision lead screw provides motion. The high-frequency filter enclosure conveniently mounts near the drive unit, and features up/down jog buttons for torch positioning.

Model	Stroke Length	Compensation Rate	Manual Rate	Load Capacity	Net Weight
12" AVC Drive	12.5 in.	22 ipm max	12 ipm	45 lbs. @ center of torch	20 lbs.
Standard (AVC) Drive	6.5 in.	22 ipm max	12 ipm	45 lbs. @ center of torch	15 lbs.
Compact (C-AVC) Drive	1 in.	15 ipm max	7.7 ipm	10 lbs. @ center of torch	10 lbs.



AP Automation offers advanced, rugged, and affordable welding equipment and systems.

Call 1-800-770-0063

E-mail sales@arc-products.com, service@arc-products.com