

## AWS-200, 350, 700 Computer Controlled TIG/PLASMA Welding System "Fully Integrated" for Automated Welding

The **AWS-200-350-700 Advanced Welding System** is a microprocessor-based system designed and built to provide a high quality, economically priced, very accurate and repeatable total welding system. This totally integrated system combines either a 200-350-700 Ampere precision D.C. power supply, Travel Rate Servo, Arc Distance Control and Wire Feed servo all in one rugged modular enclosure.

The AWS-200-350-700 is a highly refined field proven product. Its software base and hardware are the end result of 30+ years of designing and manufacturing precision automated computer controlled welding systems.



AWS 200

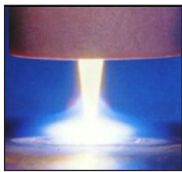


AWS 350

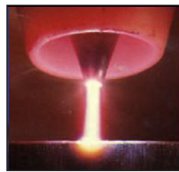


AWS 700

### Dual Process



Tig



Plasma



### Remote Operator Pendant

Full function HMI touchscreen pendant puts all system controls at the operator's fingertips.



- Close Loop Servo Control of Weld Current, Travel Speed, Arc Distance Control & Wire Feed.
- External memory, via flash drive, stores unlimited multi-level weld schedules.
- Synchronized Current, Voltage, Travel and Wire Feed.
- Torch and back up gas flow meters with gas fault sensors.
- Password protected Operator/Engineering modes

- Programmable operators overrides 0-100%.
- Minimal operator skill required.
- Detects and indicated faults, i.e., Gas Flow, Voltage, Current and Travel Limits.
- Operator friendly remote control & weld program selector.
- Isolated I/O inputs & outputs, Standard I/O outputs to PLC and additional devices, ie. Data Acquisition, Safety Switches, Auto Feeder, etc. up to 4 channels.

## THE ULTIMATE PRODUCTION SYSTEM SELECT YOUR OPTIONS



### R.P.W. REMOTE PENDANT

This remote operators pendant provides Overrides, jogs, start, stop, purge, and weld/set-up. The pendant allows the operator to access any of the weld schedules resident in the welder. Additionally displays real time feed back of weld time, voltage, current and wire.



### TRAVEL RATE POSITION-BASED SERVO

Weldlogic's position-based drive feature is a closed loop A.C. precision servo for highly accurate positional control. A wide range of A.C. motors are available to accommodate your specific rotary or linear requirements. Our T.R.S. has I/O for limit switches and a return to home sensor. Custom motors available upon request.

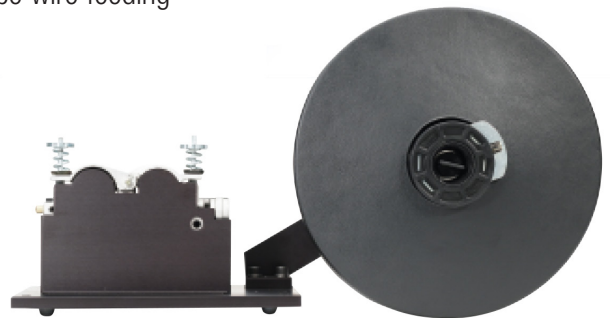
### A.D.C. - ARC DISTANCE CONTROL WITH 3" OR 6" RAMS

Weldlogic A.D.C. option is a dual function automatic torch positioner. The A.D.C. can be programmed to provide a fixed tungsten to work distance in .001 increments and also provides continuous arc distance control during the duration of the weld. The A.D.C. ram is available in a 3" & 6" stroke.



### C.W.F. COLD WIRE FEED

Weldlogic C.W.F. option is a closed loop A.C. precision servo drive for high accuracy feed rates of 0.1 to 100.0 inches per minute. A 4-drive roll mechanism provides positive production-worthy feeder for wire diameter .020 to .093. The torch mounted 3-axis manipulator places the wire in the optimum position in the weld puddle. Programable wire feed advance/retract allows for dabber type wire feeding

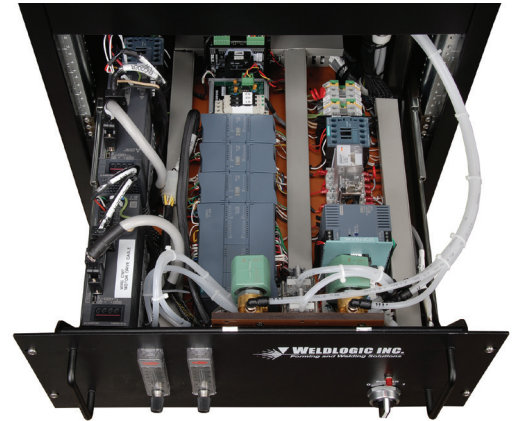




**EASY ACCESS SERVICE DRAWER**

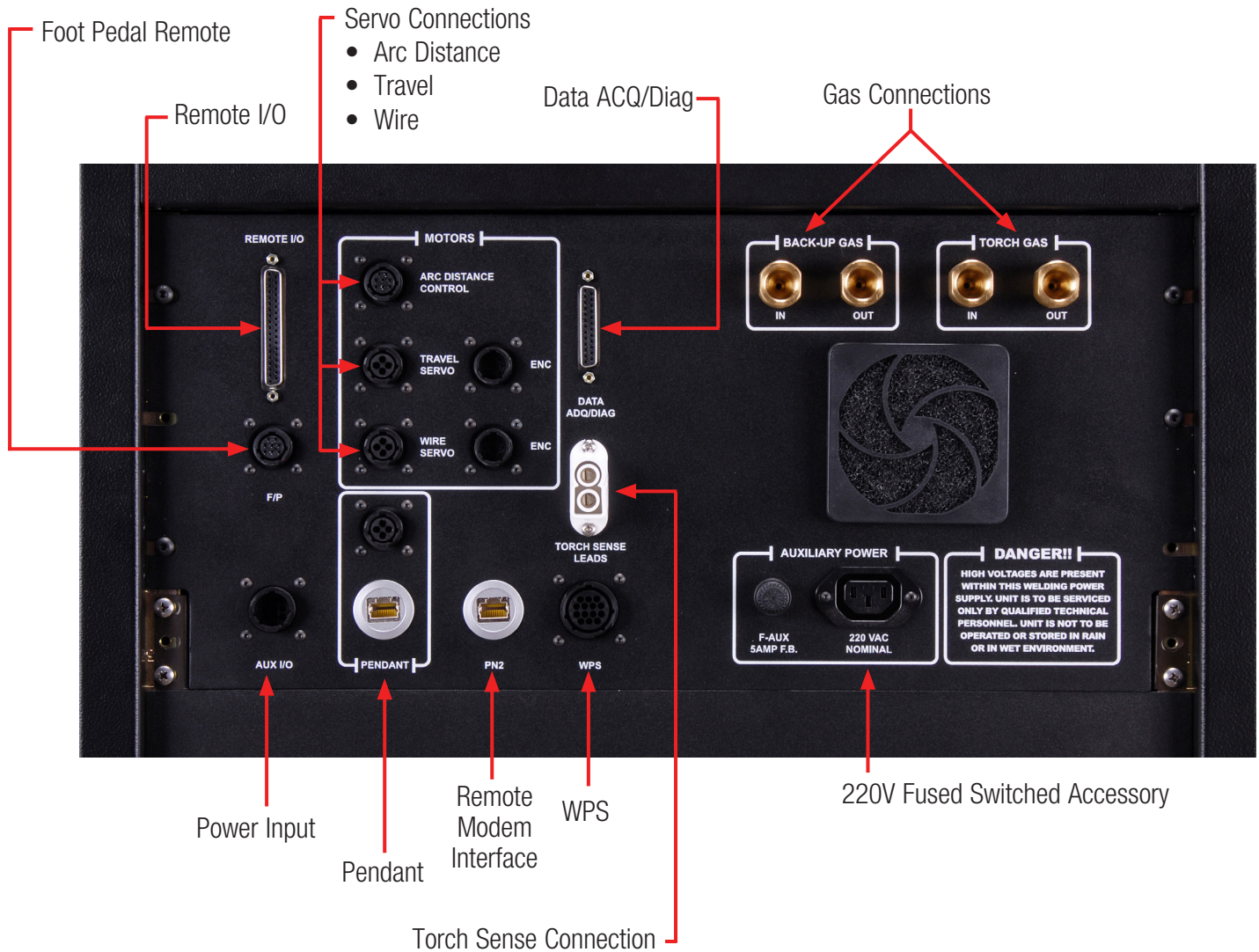
Front access drawer enables user to servicability and component replacement.

- Modular design
- Remote modem access for upgrades, modifications and support
- State-of-the-art technology



**AWS REAR PANEL**

The rear panel provides easy access to all interconnects. Clean cable runs and none of the external servo boxes we're so used to seeing in this industry.



# A POWERFUL DEVELOPMENT TOOL

## EASY TRANSFER OF WELD DATA

Program CSV file transfer via thumbdrive for offline storage and editing to PC computer.

- Easy menu driven software prompts you in plain English, SAE and Metric
- See the entire program on one screen. No single line displays to scroll through.
- Print, review & edit your weld schedules at your desk.
- Password protection of your weld schedules.



## SETUP SCREENS

| Files              | Gas     | Current  | ADC/EG4  | Travel   | Wire     | Levels |
|--------------------|---------|----------|----------|----------|----------|--------|
| Axis Pos           | 32.65   | Level2On | Level3On | Level4On | Level5On |        |
| Pk Current [Amps]  | 200.00  | 189.00   | 156.95   | 147.20   | 135.00   |        |
| Bg Current [Amps]  | 75.00   | 65.00    | 59.00    | 52.00    | 40.00    |        |
| ADC Mode [PK/OFF]  | ON      | OFF      | OFF      | OFF      | OFF      |        |
| ADC Peak Yolts     | 12.0    | 11.6     | 11.2     | 10.7     | 10.1     |        |
| Pulse Freq [PPS]   | 12.5    | 12.5     | 12.5     | 12.5     | 12.5     |        |
| Pk Pulse Width [%] | 35.00   | 35.00    | 35.00    | 35.00    | 35.00    |        |
| Weld Spd [M/Min]   | +0.500  | +0.473   | +0.452   | +0.441   | +0.438   |        |
| Wire Mode [On/Off] | OFF     | OFF      | OFF      | OFF      | OFF      |        |
| Pk Wire Spd [M/M]  | +0.960  | +0.986   | +0.921   | +0.853   | +0.789   |        |
| Bg Wire Spd [M/M]  | +0.590  | +0.550   | +0.521   | +0.452   | +0.419   |        |
| Level End Pos [mm] | +552.00 | +326.00  | +523.50  | +465.90  | +442.80  |        |

| Files                 | Gas          | Current | ADC/EG4            | Travel | Wire | Levels |
|-----------------------|--------------|---------|--------------------|--------|------|--------|
| Wire Start Delay      | +0.2 seconds |         | Pulse Freq [PPS]   | 12.5   |      |        |
| Wire Retract Distance | 25.00 mm     |         | Pk Pulse Width [%] | 35.00  |      |        |
| Wire Jog Speed        | 2.540 M/Min  |         | Pk Wire Spd [M/M]  | +0.960 |      |        |
|                       |              |         | Bg Wire Spd [M/M]  | +0.590 |      |        |

| Files                    | Gas    | Current | ADC/EG4                   | Travel | Wire | Levels |
|--------------------------|--------|---------|---------------------------|--------|------|--------|
| PLS - Step Mode [On/Off] | OFF    |         | PLS Axis Position [mm]    | +32.65 |      |        |
| PLS - Start Delay Time   | +0.1   |         | Start Point Distance [mm] | +45.0  |      |        |
| PLS - Jog Speed [M/Min]  | +2.500 |         | Start Point Speed [M/Min] | +1.000 |      |        |

| Files                  | Gas       | Current | ADC/EG4           | Travel      | Wire | Levels |
|------------------------|-----------|---------|-------------------|-------------|------|--------|
| Torch Pre-Purge Time   | +2.0 Secs |         | GAS Sensor Status | [Indicator] |      |        |
| Torch Post-Purge Time  | +3.0 Secs |         | DOG Enable        | ON          |      |        |
| Backup Post-Purge Time | +2.0 Secs |         | Torch             | [Indicator] |      |        |
| Manual Purge Status    | GAS OFF   |         | Backup            | [Indicator] |      |        |

| Files          | Gas       | Current | ADC/EG4 | Travel | Wire | Levels |
|----------------|-----------|---------|---------|--------|------|--------|
| Uplope Time    | +0.0 Secs |         |         |        |      |        |
| Downslope Time | +0.0 Secs |         |         |        |      |        |
| Start Current  | +50 Amps  |         |         |        |      |        |
| Finish Current | +5 Amps   |         |         |        |      |        |

| Files                | Gas   | Current | ADC/EG4             | Travel      | Wire | Levels |
|----------------------|-------|---------|---------------------|-------------|------|--------|
| Travel Position [mm] | 32.65 |         | Level               | 1           |      |        |
| Current              | -26.5 |         | ADC Over-ride       | [Indicator] |      |        |
| Voltage              | -2.7  |         | REVERSE             | Travel Jog  |      |        |
| Travel Spd [M/M]     | 0.05  |         | FORWARD             | Jog         |      |        |
| Wire Spd [M/M]       | 2.54  |         | Home Sw Not Enabled |             |      |        |

| Files                 | Gas          | Current | ADC/EG4           | Travel      | Wire | Levels |
|-----------------------|--------------|---------|-------------------|-------------|------|--------|
| Start Gap             | +0.526 mm    |         | ADC Limit Status  | [Indicator] |      |        |
| ADC Unlock Delay Time | +0.1 seconds |         | Jog Up            | [Indicator] |      |        |
| ADC Retract Distance  | +1.270 mm    |         | Jog Down          | [Indicator] |      |        |
| ADC Speed             | 3.000 mm/sec |         | ADC Gap Test      | [Indicator] |      |        |
| ADC Override Limit    | +5 percent   |         | ADC Axis Position | 1.364 mm    |      |        |

| Admin Page                |                                     |                            |                                     |                  |       |  |
|---------------------------|-------------------------------------|----------------------------|-------------------------------------|------------------|-------|--|
| Current Feed back Scale % | 51.9                                | WPS (Welding Power Supply) |                                     |                  |       |  |
| Voltage Feed back Scale % | +103                                | PK11 Monitor SW            |                                     |                  |       |  |
| Peak Current Scale %      | +54.90                              | Current                    | -26.4                               | Voltage          | -2.7  |  |
| Backup Current Scale %    | +54.90                              | Travel Position [mm]       | 34.00                               | Travel Spd [M/M] | 0.050 |  |
| PID In-accuracy %         | +3                                  |                            |                                     |                  |       |  |
| PWL / UPS Select          | <input checked="" type="checkbox"/> | UPS Selected               | Level                               | 1                |       |  |
| Home Sensor Enable        | <input checked="" type="checkbox"/> | Home Sensor Enable         |                                     |                  |       |  |
| UPS EOTs N.O. / N.C.      | <input checked="" type="checkbox"/> | EOTs N.O.                  |                                     |                  |       |  |
| Wire Feeder Installed     | <input checked="" type="checkbox"/> | Diagnostic Mode            | <input checked="" type="checkbox"/> |                  |       |  |

## AWS-200-350-700 TYPICAL APPLICATIONS



Seam Welding



Circumferential Welding



Custom Weld Systems