WELDLOGIC INC.
Forming and Welding Solutions

Welding Solutions for Advanced Manufacturing

AWS-200, 400, 800

Computer Controlled TIG/PLASMA Welding Systems
"Fully Integrated" for Automated Welding

The AWS-200-400-800 Advanced Welding Systems are microprocessor-based systems designed and built to provide a high quality, economically priced, very accurate and repeatable total welding systems. These totally integrated systems combine either a 200, 400 or 800 Ampere precision A.C./D.C. or D.C. power supply, Travel Rate Servo, Arc Distance Control and Wire Feed servo all in one rugged modular enclosure.

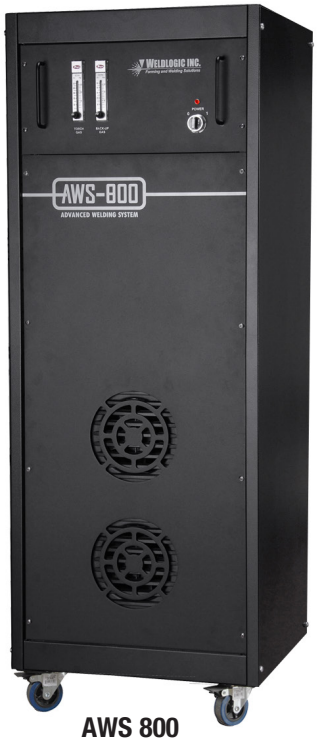
The AWS-200-400-800 is a highly refined field proven product. Its software base and hardware are the end result of 30+ years of designing and manufacturing precision automated computer controlled welding systems.



AWS 200

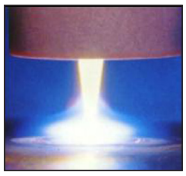


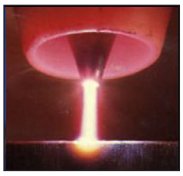
AWS 400



AWS 800

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 Aquisition, Safety Switches, Auto Feeder, etc. up to 4 channels.

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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.

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.



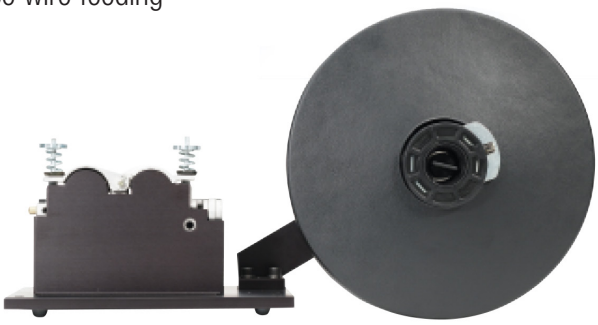


TRAVEL RATE POSITION-BASED SERVO

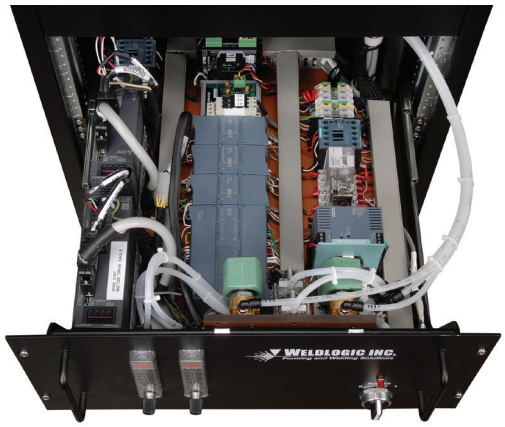
Weldlogic's position-based drive feature is a closed loop A.C. precision servo for highly accurate positional control. A wide range of A.C. motors are available to accommodate your specific rotary or linear requirements. Our T.R.S. has I/O for limit switches and a return to home sensor. Custom motors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

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



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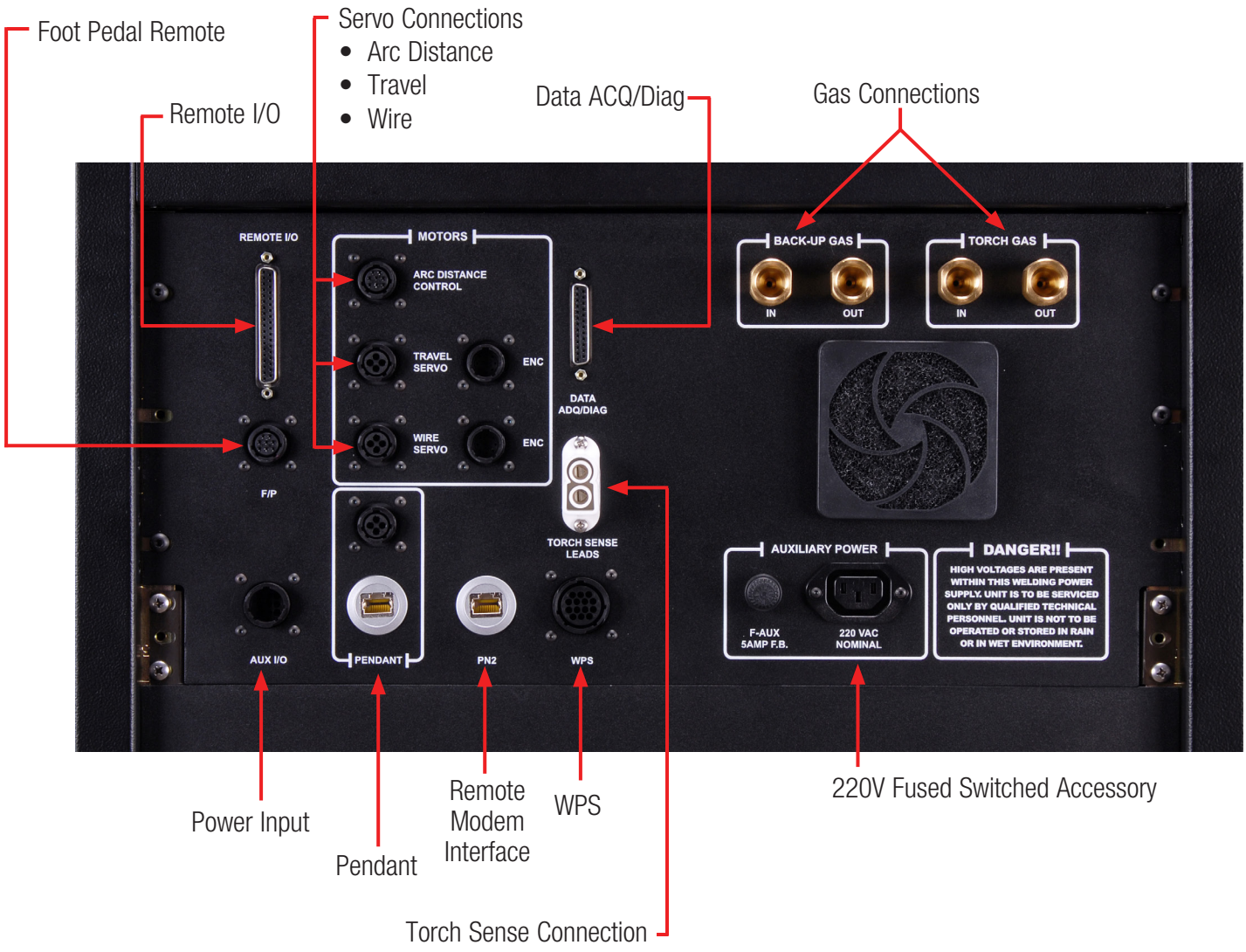
EASY ACCESS SERVICE DRAWER

Front access drawer enables user to servicabiliity 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.



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A POWERFUL DEVELOPMENT TOOL

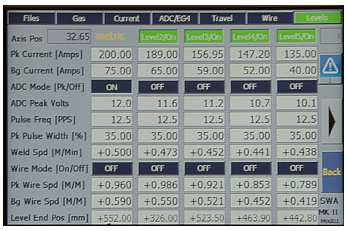
EASY TRANSFER OF WELD DATA

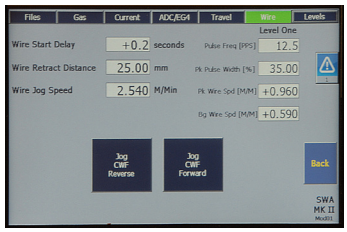
Program CSV file transfer via thumbdrive for offline storage and edting to PC computer.

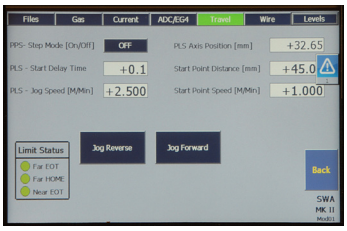
- Easy menu driven software prompts you in plain English, SAE and Metric
- See the entire program on one screen. No single line displays to scroll through
- Print, review & edit your weld schedules at your desk
- Password protection of your weld schedules

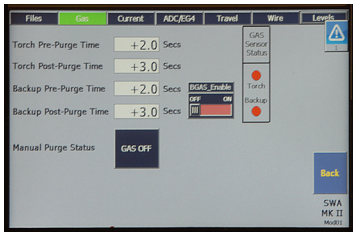


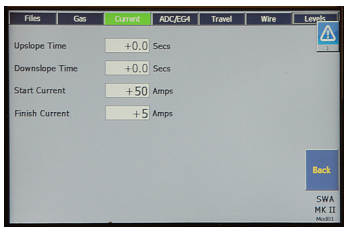
SETUP SCREENS

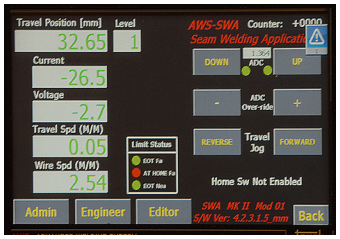


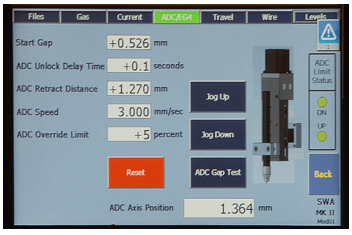


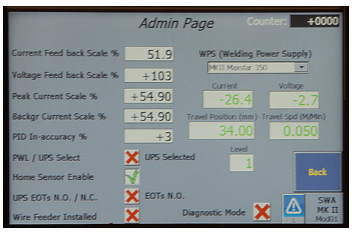












AWS-200-400-800 TYPICAL APPLICATIONS



Seam Welding



Circumferential Welding



Custom Weld Systems

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AWS SPECIFICATIONS SUBJECT TO CHANGE

Welding Solutions for Advanced Manufacturing

AWS-200-400-800 WELDER

FRONT PANEL
- Power on/off switch (Circuit Breaker)
- Adjustable flow meters for torch and backup with gas fault sensor
- Easy access service drawer

REAR PANEL
- Twist Lock Connectors (ADC, Travel, Wire, Pendant, USB, Foot Pedal)
- DB-37 Remote I/O
- Dinse-Torch, Work
- Quick Disconnect Gas In and Out, Torch and Backup Gases
- Power Cable 220V AC, 25 Amps., 8 feet long

WELD SCHEDULE CAPACITY
- External memory storage via thumbdrive to PC

PRIMARY INPUT POWER
- Input Voltage: **TBD**
- Line Current: **TBD**
- Frequency: **TBD**

SECONDARY OUTPUT POWER
- Welding Range: 1 to 200/400/800 Amperes
- Peak Pulse Current: 200-800 Amperes
- Duty Cycle: **TBD**
- Voltage: 16 Volts @190/380 Amps

ARC STARTER
- Voltage: H.V. Impulse

MOTOR DRIVES
- Rotary/Linear A.C. Servo. Amperes current **TBD**
- Computer Interactive Arc Distance Control
- Wire feed servo

COMMUNICATIONS
- USB port for thumbdrive
- Optional I/O interface
- Remote Operator Pendant

PHYSICAL DATA
- Dimensions: **TBD**
- Shipping Weight- **TBD**
- Net Weight **TBD**

OPERATING ENVIRONMENT
- Ambient Temperature: 40 to 110 F (4.4 to 43 C)
- Relative Humidity: 10% to 90%

UTILITIES
- Inert Gas Control: 5 to 50 SCFH @ 40 to 60 PSI Adjustable flow meters

REMOTE OPERATOR PENDANT
- Operation Modes: WELD/SETUP
- Welding Function: Sequence START/STOP DOWNSLOPE Manual PURGE
- Travel Functions: Return to HOME
- Display Functions: **TBD**

AWS-200-400-800 PROGRAMMABLE PARAMETERS

SYSTEM MODES
- Pulse Mode (OFF/ON)
- Sequence Mode (MAN/TIME)
- Auto Sequence Mode: (OFF/ON)
- Stubout Mode (OFF/ON)
- Return To Home (OFF/ON)
- Start From Home (OFF/ON)
- Plasma mode (OFF/ON)

GAS PARAMETERS
- Torch Prepurge Time 0 to 1000 Secs.
- Torch Preplurge Time 0 to 1000 Secs.
- Backup Prepurge Time 0 to 9999 Secs.
- Backup Prepurge Time 0 to 9999 Secs.

CURRENT PARAMETERS
- Start Current 1 to 50 Amps.
- Upslope Time 0 to 100.0 Secs.
- Level Slope time 0 to 100.0 Secs.
- Downslope Time 0 to 100.0 Secs.
- Finish Current 1 to 50 Amps.
- Current Override Limit 0 50 100%

ARC DISTANCE CONTROL PARAMETERS
- Start Gap 001 to .250 Inch (.0254mm to 6.35mm)
- ADC Unlock Delay Time 0 to 100.0 Secs.
- ADC Retract Distance 0 to 3.0/6.0 Inches (76.2mm/152mm)
- ADC Sensitivity 0 to 100%
- ADC Deadband 0 to 1.0 Volts
- ADC Override Limit 0 to 100%

TRAVEL PARAMETERS
- Step Mode (ON/OFF)
- Travel Start Delay Time 0 to 100.0 Secs.
- Weld Direction (FWD/REV) (CW/CCW)
- Travel Jog Speed 0 to Full Range*
- Travel Advance Time 0 to 999.9 Secs.
- Travel Advance Speed 0 to Full Range*
- Travel Speed Overide Limit 0 to 100%

*Full Range Depends on Motor and Mechanism

WIRE PARAMETERS
- Wire Start Delay (ON/OFF)
- Wire Jog Speed 0 to 100.0 IPM (42.3mm.s)
- Wire Retract Distance 0 to 1.0 Inch (0 to 25.4mm)
- Wire Override Limit 0 to 100%

LEVEL PARAMETERS
- Peak Current 1 to 200/350/700 Amps
- Background Current 1 to 200/350/700 Amps
- ADC (Off/Cont/Peak) (Off/Peak/Cont)
- Peak voltage 7.0 to 25.0 Volts
- Background voltage 7.0 to 25.0 Volts
- Pulse Rate 0.1 to 100 P.P.S.
- Pulse Width 0.1 to 99.9%
- Wire Mode OFF/ON
- Peak Wire Speed 0 to 100.0 IPM (42.3mm/s)
- Background Wire Speed 0 to 100.0 IPM (42.3mm/s)
- Level Time 0.1 to 999.9

* Alternate RPM and linear speed options available

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