

Auto-Axcess® Systems

Software Driven Multi-MIG® Process Platform

Issued September 2009 • Index No. AU/8.0

Robotic Welding
Systems



Quick Specs

Manufacturing Applications

Construction Equipment
Automotive Components
Recreational Vehicles
Farm Machinery
Office Furniture
Mining Machinery

Processes

Multi-MIG®

Accu-Pulse® MIG (GMAW-P)
- Accu-Pulse™ tandem (optional)
- Accu-Curve™ MIG
- Accu-Speed™ MIG
Pulsed MIG (GMAW-P)
Metal Core
MIG (GMAW)

FREE TRIAL! See page 2 for details
RMD™ (GMAW-SCT) *Optional*

Rated Output 300: 300 A at 32 VDC, 60% Duty Cycle
(225 A at 29 VDC, 100% Duty Cycle)
450: 450 A at 44 VDC, 100% Duty Cycle
675: 675 A at 44 VDC, 100% Duty Cycle

Voltage Range 10–44 V

Auxiliary Power 120 VAC, 10 A Duplex

Ship Weight 300: 116 lb (52.6 kg)
450: 163 lb (72.9 kg)
675: 208 lb (94.3 kg)

The Power of Blue.®

Flexible, Expandable and Upgradeable

Multi-MIG capable welding systems are precise, digitally controlled and software-driven. For additional information see page 2.

Axcess digital control technology combined with inverter welding power source is designed to reduce complexity of a robotic pulsed MIG system, simplify installation and provide superior welding performance.

“**Axcess**” the ability to accommodate welding data file exchange through downloadable upgrades and new hybrid welding processes using e-mail, or the Web and a PC or Palm™ handheld (PDA).

Separate **9-pin Palm™ handheld (PDA)** and **9-pin RS-232 serial communication ports** provide Axcess with data transfer and optional program downloads via Palm handheld or PC.

Look for high-speed video clips of Accu-Pulse®, Accu-Curve™, Accu-Speed™ and Front Panel Simulator at MillerWelds.com/AMS/axcess.

Auto-Axcess 675

Auto-Axcess 450

Auto-Axcess 300



Shown with AA-40GB with OCP wire drive motor assemblies (Motor control cables must be ordered separately.)



AA-40GB motor connections.



Miller's patented technology allows for **any** input voltage hook-up (190–630 V) with no manual linking. Assures rock-solid, consistent output on fluctuating primary lines.

Fan-On-Demand™ only operates when needed, cooling internal components.

Wind Tunnel Technology™ prevents abrasive dust and particles from damaging internal components.

1/4-turn steel connectors allow for faster installation of system and eliminates thread stripping.

115 VAC duplex receptacle provides 10 A circuit-breaker-protected auxiliary power regardless of primary power.

Dual removable lifting eyes for moving with overhead lifts. Removability allows for flat-top feeder or storage on top.

Forklift slots cut into the frame for forklift transportation.

Matching footprints — all models use common stacked power modules allowing small footprint.



Power source is warranted for 3 years, parts and labor.

DESIGNED **USA**
AND BUILT IN **USA**



Features and Benefits

SOFTWARE (Standard)

FREE 8 Hour Trial of RMD™ with Every New Axxess Power Supply

Multi-MIG® capability	Includes common carbon steel, aluminum and stainless welding programs, including patented Accu-Pulse® , Accu-Curve™ and Accu-Speed™ standard or adaptive pulse, conventional MIG and metal core programs using the most popular wire diameters and gas combinations.
SureStart™	Provides consistent arc starts by electronically assuring a ball is not left on the wire when welding is stopped. This provides a predictable condition for the next arc start and combines this with precisely tuned arc starting routines.
Arc Control	Control offers a simple way to tailor factory pulse weld programs by adjusting the arc plasma cone to accommodate a variety of welding applications without the need for any reprogramming or changing any hardware.
Arc Adjust	Allows a simple method that controls arc length for pulse processes and wetting action for RMD.
Remote/trigger program select	Allows changing weld programs to take advantage of up to 8 programs of Multi-MIG welding process capabilities.
Optional Axxess-able software	RMD™ (Regulated Metal Deposition), Axxess file management system, WaveWriter™ pulse wave shaping.

Multi-MIG® Process Capability — Through Software-Based Programs

“Axxess®” the ideal welding process for any weld joint at hand. Whether you need high travel speed combined with high deposition rates or require gaps to be filled, any combination of the available welding processes can be “Axxess”-ed either at the start of a welding sequence or anywhere in the weld while actually welding by using trigger or remote program select.

Process	Standard Spray	Pulsed Spray	Accu-Pulse® Accu-Speed™ Accu-Curve™	Standard Short Circuit	RMD™ Regulated Metal Deposition (Optional)
Weld Puddle Control	Flat/Horizontal	All Position Performance		Thin Materials/Gap Filling	

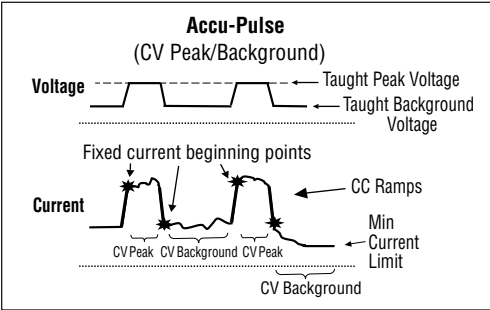
Note: To achieve optimum performance, 4/0 welding power secondary cable is recommended and the supplied work-sense lead must be connected as close to arc as possible.

For a given wire-feed speed, the chart below shows from left (hottest) to right (coolest) all the possible arc mode transfer ranges of “Axxess”-able MIG processes. This shows compatible spray gas combinations such as 90 Ar/10 CO₂ (90% Argon and 10% Carbon Dioxide) on steel using the same wire-feed speed and also gives an indication of puddle control characteristics based on arc type selected.

Featured Welding Process

Accu-Pulse® STANDARD on all Axxess models

The patented Accu-Pulse process allows for precise control of the pulse arc. Accu-Pulse provides optimum molten puddle control and has power to increase wire feed speeds and deposition 20 to 25% in many applications. In most cases, slightly different ratios of gas mixtures will perform well using a similar program and adjusting arc length or the appropriate arc control for the selected process. Contact Miller for more information on less common materials and gas combinations.



Benefits (Compared to conventional pulse)

- Shorter arc lengths possible
- Better puddle control
- More tolerant of contact tip to work variation
- Less audible noise
- No arc wandering in tight corners
- Narrow arc plasma column
- Allows weld to fill in at toes increasing travel speed and deposition
- More tolerant of poor fit up and gaps (compared to standard pulse)
- Ideal for robot seam tracking applications

Accu-Pulse® tandem OPTIONAL on Auto Axxess models

The Accu-Pulse tandem process comprises two independent welding wires fed through a common torch into a common arc. Each wire has its own power source, wire drive, and contact tip. The power supplies cooperate by alternating pulses on each wire. The Accu-Pulse tandem process works best in automated high speed or high deposition applications.

Accu-Curve™ STANDARD on all Axxess models (see note below)

Accu-Curve is a variation of the Accu-Pulse process. The transitions from peaks to background voltage are “curved”. The curved transitions provide a “softer” feel without sacrificing the tight arc lengths that allow for better puddle control and have become the hallmark of the Accu-Pulse process.

Benefits

- “Softer” feel than Accu-Pulse
- Allows tight arc lengths and better puddle control

Accu-Speed™ STANDARD on all Axxess models (see note below)

Accu-Speed is a variation of the Accu-Pulse process and was developed for the type of arcs needed in automated welding applications. Accu-Speed has a tighter driving arc that can be directed into the joint, yet still remains stable at the higher travel speeds used in automated welding. In general, Accu-Speed has lower average voltage and amperage when compared to Accu-Pulse which makes it ideal when welding out of position in the manual mode.

Benefits

- Up to 20% greater travel speed than Accu-Pulse
- Lower average voltage/amperage than Accu-Pulse
- Tight, driving arc
- Remains stable at higher travel speeds

Note: Accu-Curve and Accu-Speed can be added to existing Axxess systems for FREE by updating code online at MillerWelds.com/AMS/axcess. Requires Palm handheld or PC to transfer code from web site download to Axxess.

Software-Based Welding Process Option

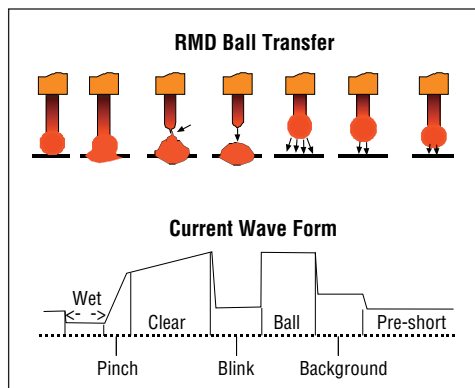
RMD™ (Regulated Metal Deposition)

Field #195 252 (serial # must be provided)
Field installation requires Palm handheld.

Note: Factory-installed software can be ordered as a combo-number option with power supply. See power source stock number listings on page 8.

The unique patented design of RMD (Regulated Metal Deposition) is a precisely controlled short-circuit transfer. It is a method of detecting when the short is going to clear and then rapidly reacting to this data changing the current levels. Features Proactive Dynamic Puddle Control.

Note: Palm handheld or PC version of File Manager required for field option installation — Field kit includes cable for connecting to Axxess.



Benefits

- Weld suited to thin materials
- Can replace TIG process in some applications
- Gap filling
- Spatter reduction
- Provides less heat into work piece
- Excellent performance on stainless steel
- Can be combined with other Axxess®-related programs
- Minimize distortion
- Use larger diameter wire on thin materials

Palm OS® Based Software Options

Axxess® File Management (required Palm Handheld or PC not included)



#195 249 for Palm

Includes palm serial cable and expansion card

#300 529 for PC

Includes USB cable and File Management software

Simply put, the Miller (Palm OS based) File Management software turns a standard handheld (PDA) or PC into a remote pendant control for all Axxess Systems.

There are 3 basic types of files:

- 1) **Programs** – Contain all the welding data that create an arc: volts, amps, wire feed rates, wire type, size, gas and appropriate arc control. They also contain all the time-based functions typically used in welding: pre-flow, start conditions, ramps, crater fill, retract, and post-flow.
- 2) **Configuration** – Files contain Locks, Errors and Feeder information that include robot selection type (**Robot Control** – PS Wire and Gas, **Shared Control** – Arc On-Analog, and **Power Source Control** – Arc On-No Analog). Configuration enables error messages, dual schedule, and remote program select to be selected. It also allows for checking software revisions and arc/ cycle time data. Using configuration you can set Auto-Thread™ torch length allowing for pushbutton feed of an exact wire length.
- 3) **Back-up** – Back-up files allow a convenient and simple way to store all files from a welding power source in a Palm handheld or PC.

Each type can reside or be “Axxess”ed in any of 3 locations:

- 1) **Welder** – The welding power source holds the main library of welding programs.
- 2) **Handheld or PC** – The handheld or PC acts as an interim storage device where files can be pulled from the power source stored or modified.
- 3) **E-mail** – Files can be stored for Email in this location.

Any of the files can be cut, copied, pasted or modified. UN-protected files can also be beamed through IR port. Copyright-protected and Miller proprietary files cannot be transferred such as Axxess File Management, WaveWriter™, and RMD™ welding process.

Palm™ Convenience Package (Axxess File Management and WaveWriter software not included)

#195 517

Includes a compatible Palm™ handheld loaded with Service Pak software and a Palm™ serial cable that connects the Palm and Axxess®.

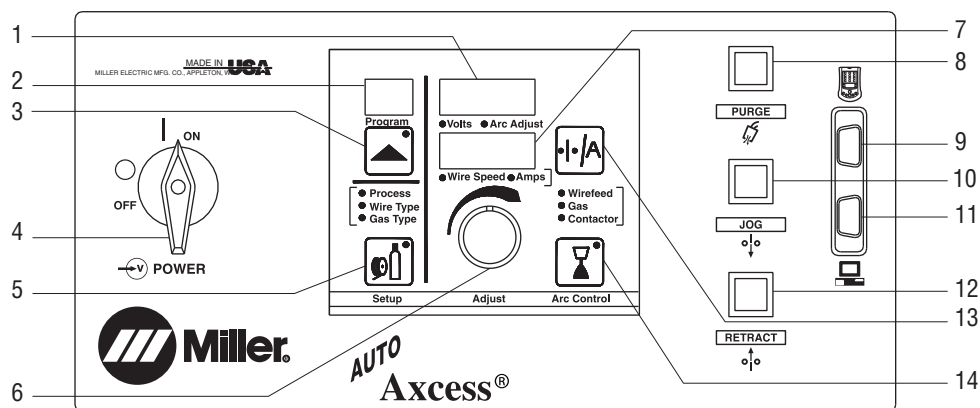
Note: Palm model may vary and Axxess File Management and WaveWriter software are sold separately.

With Miller's Axxess File Management installed on your Palm OS handheld or PC you can:

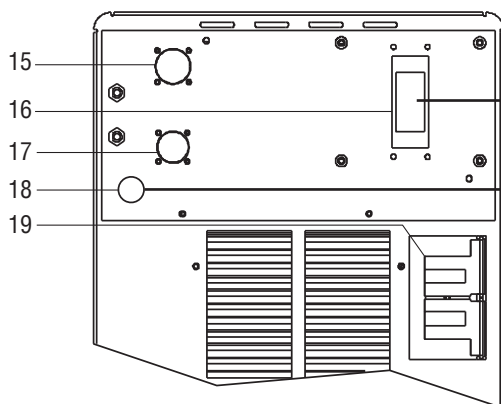
- E-mail Axxess files anywhere worldwide
- Configure any Axxess system as desired
- Configure multiple Axxess systems exactly the same or any way you choose
- Save and store Axxess files
- Transfer Axxess files to computers
- Transfer Axxess files from machine to machine
- Backup Axxess files and programs
- Set-up and modify Axxess welding sequences
- Adjust and store welding program Locks & Limits for restricting or limiting operator “Axxess” to programs
- Enable Auto-Thread™ feature to program torch length into Axxess memory. When a combination of purge and jog (or jog and retract) are depressed, the Axxess feeding system delivers exact programmed length of wire. Great for troubleshooting wire feed speed and loading wire into the system.

Control Panels

Front Panel



Back Panel



72-pin Harting connector for quick, easy connection to common robot controllers (ABB, Fanuc, KUKA and Motoman) with optional adapter cables. Analog robot controls. Available on analog power supplies.

Device Net Connector for quick, easy connection to common robot controllers (ABB, Fanuc, KUKA and Motoman) with standard device net cables. Available on DeviceNet power supplies.

1. Voltage/Arc Adjust Display Meter
2. Program Display
3. Program # Select
4. Power Switch
5. Process Setup Button
6. Control Knob
7. Wire Speed/Amperage Display Meter

8. Purge Pushbutton
9. Handheld RS-232 Port
10. Jog Forward Pushbutton
11. PC-Communication RS-232 Port
12. Jog Retract Pushbutton
13. Wire Feed/Amperage Select
14. Arc Control

15. Peripheral Connector
16. Robot Connection
17. Motor Connector
18. DeviceNet Connector (Optional)
19. 115 VAC, 10 A Duplex Receptacle

Capabilities

Auto-CAL (Automatic Calibration)— Patented software-based feature exclusive to Auto-Access. Allows simple, quick and accurate wire feed speed and voltage commands from most robots using analog signals. Auto-Access calibrates itself to deliver exact responses to commands from robots. This allows Auto-Access to be used interchangeably with many brands of robots, and allows quick replacement of competitive power supplies without the need to change wire feed speeds. Available on analog power supplies.

Remote Program Select— Allows changing weld programs from the robot controller to take advantage of up to eight programs or Multi-MIG® welding process capabilities.

Integrated 80 V Touch Sensor— To be used with external circuitry or peripheral equipment when touch sensing.

Front Panel Features

- Weld Process Selection
- Wire Size and Type
- Gas Type
- Wire Jog Forward Button
- Wire Jog Reverse Button
- Purge Button
- Digital Display Meters:
 - Voltage/Arc Adjust (Trim)
 - Wire Feed Speed/Amperage
- Program Number
- Arc Control (SharpArc® and Inductance)

Analog Outputs

- Voltage
- Current

Analog Inputs

- Voltage/Arc Adjust (Trim)
- Wire Feed Speed

Digital Outputs

- Arc On
- Wire Stick
- Welder Ready

Digital Inputs

- Start
- Jog Forward
- Jog Reverse
- Purge
- Program Select
- E-Stop

Auto Setup

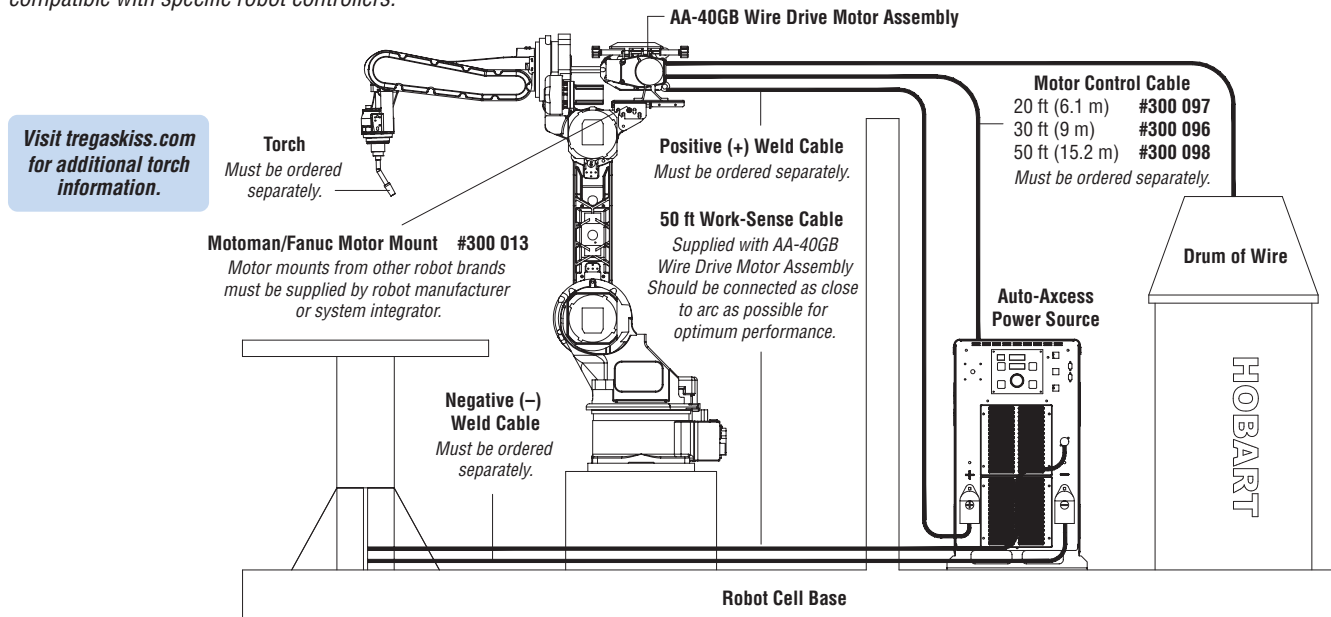
- Robot Specific

Sequence

- Preflow: 0–9.9 sec
- Start Power: 0–2.5 sec
- Voltage: 10–44
- IPM: 50–1400
- Crater: 0–2.5 sec
- Retract
- Postflow: 0–9.9 sec

Typical Installation (Robotic/Automation Pulsed MIG or Conventional MIG)

The Auto-Access platform is designed to bring the benefits of digital control technology to manufacturers who currently use analog robot control. When combined with a Smart Cable (#300 012) and AA-40GB wire drive motor assembly the Auto-Access will automatically reconfigure itself to function as a semi-automatic, thereby providing for single asset management and simplicity. *Contact Robot Manufacturers for fully-digital versions of the Access compatible with specific robot controllers.*



Power Source



Model	Rated Output	Voltage Range	Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz, 3-Phase							Dimensions	Net Weight
Auto-Access 300	300 A at 32 VDC, 60% Duty Cycle (225 A at 29 VDC, 100% Duty Cycle)	10–44 V	5–400 A	80 VDC	33	29.7	16.9	14.6	11.6	11.7	11.2	300 H: 23 in (584 mm) 450 H: 31 in (787 mm) 675 H: 39 in (991 mm) W: 17 in (432 mm) D: 22-1/2 in (572 mm)	116 lb (52.6 kg)
Auto-Access 450	450 A at 44 VDC, 100% Duty Cycle	10–44 V	5–600 A	80 VDC	—	60	33.7	28.8	22.8	23.8	22.9		163 lb (73.9 kg)
Auto-Access 675*	675 A at 44 VDC, 100% Duty Cycle	10–44 V	5–900 A	80 VDC	—	89.7	—	43.7	34.8	35.7	34.4		208 lb (94.3 kg)



Certified to both the Canadian and U.S. Standards for welding equipment. *Auto-Access 675 is not CSA approved.

Wire Drive Motor Assembly

Wire drive motor assemblies do NOT include drive rolls or required Motor Control Cable. These must be ordered separately.
Note: Left- and right-hand drives are determined by facing the wire feed gun outlet.



AA-40GB Wire Drive Motor Assembly

#195 426 Left-Hand Drive

#195 515 Right-Hand Drive

The AA-40GB Wire Drive Motor Assembly with OCP (Over Current Protection) is an improved version of the AA-40G. The motor control cable

now mounts directly to the gas box, reducing strain on the tachometer wires. OCP provides another layer of protection in the event a cable is damaged or shorted, reducing downtime and motor damage. Motors include a 50 ft volt-sense lead.

Model	Gas Valve	Type of Input Power	Connection to Power Source	Wire Feed Speed Range*	Wire Diameter Range	AA-40GB Dimensions	Ship Weight
AA-40GB	Included and enclosed	40 VDC (from Auto-Access)	Motor Control Cable—20, 30, or 50 ft (Order separately)	50–1400 IPM (1.3–35.56 MPM)	.035–3/32 in (0.9–1.6 mm)	H: 8 in (203 mm) W: 12 in (305 mm) D: 10 in (254 mm)	23 lb (10.4 kg)

*This is the wire feed speed range while using MIG. With pulsed MIG, the wire feed speed range may be more limited.

Drive Roll Kits and Guides (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include 4 drive rolls, the necessary guides and feature an anti-wear sleeve for inlet guide.

Wire Size	 "V" groove for hard wire	 "U" groove for soft wire or soft-shelled cored wires	 "V" knurled for hard-shelled cored wires	 "U" cogged for extremely soft wire or soft-shelled cored wires (i.e., hard facing types)
.023/.025 in (0.6 mm)	#151 024	—	—	—
.030 in (0.8 mm)	#151 025	—	—	—
.035 in (0.9 mm)	#151 026	#243 233	#151 052	—
.040 in (1.0 mm)	#161 190	—	—	—
.045 in (1.1/1.2 mm)	#151 027	#243 234*	#151 053	#151 070
.052 in (1.3/1.4 mm)	#151 028	#151 038	#151 054	#151 071
1/16 in (1.6 mm)	#151 029	#243 235	#151 055	#151 072
.068/.072 in (1.8 mm)	—	—	#151 056	—
5/64 in (2.0 mm)	—	#151 040	#151 057	#151 073
3/32 in (2.4 mm)	—	#151 041	#151 058	#151 074
7/64 in (2.8 mm)	—	#151 042	#151 059	#151 075
1/8 in (3.2 mm)	—	#151 043**	#151 060**	#151 076**

*Accommodates .045 and .047 (3/64 in) wire.

** May require a low-speed, wire-feed drive-roll option.

Nylon Wire Guides for Feeding Aluminum Wire

Wire Size	Inlet Guide	Intermediate Guide
.035 in (0.9 mm)	#221 912	#242 417
.047 in (1.2 mm)	#221 912	#205 936
1/16 in (1.6 mm)	#221 912	#205 937

Note: "U" groove drive rolls are recommended when feeding aluminum wire.

Wire Guides

Wire Size	Inlet Guide	Intermediate Guide
.023–.040 in (0.6–1.0 mm)	#150 993	#149 518
.045–.052 in (1.1–1.4 mm)	#150 994	#149 519
1/16–5/64 in (1.6–2 mm)	#150 995	#149 520
3/32–7/64 in (2.4–2.8 mm)	#150 996	#149 521
1/8 in (3.2 mm)	#150 997	#149 522

Genuine Miller Service and Accessories

Consulting Services

Field Application Support #195 480

Auto-Axcess systems may require factory-trained technical support depending on the complexity of the application and the local availability and capability of qualified welding engineers or robotic experts. You should contact the factory if there are questions. Factory support is available at a flat rate of \$1250.00 per day plus expenses when planned and ordered more than 10 days in advance. Rates and availability of our technical specialists with less than 10 day notice are considerably more. Rates are based on a 10-hour day including travel. One day minimum.

Service and Troubleshooting

Analog Robot Simulator #195 030

Device simulates the analog commands of typical robots. It can be used as a diagnostic tool to determine power source functionality and isolate robot, power source or cable issues.

Fanuc Internal Wiring Kit #300 229

Includes 30 ft cable that connects to the Fanuc controller, and 22 in connector for mounting the wire drive assembly on top of the robot arm.

Receptacle/Adapter Kits

#194 793 ABB
#194 791 Fanuc
#194 790 Motoman
#300 056 Panasonic
#195 002 Universal

One required per machine. For analog communication with robot controls via 72-pin Harting connector on Auto-Axcess. 1-ft length.

Smart Adapter #300 012

Allows Auto-Axcess to be configured to function as semi-automatic. To be used when there is a desire to have a common power supply and motor in both robotic and semi-automatic application. Easy asset management. 21-ft trigger control cable is included.

Universal Connector for Analog Control #195 002

Includes mating Harting connector with pins to allow custom configuration for robotic and fixed automation applications.

Fanuc/Motoman Wire Drive Motor Assembly Mounting Bracket #300 013

Shell Connector #194 847

For use by anyone wishing to interface peripherals, but not wanting to source the appropriate female amphenol connector.



Coolant Flow Switch #195 461

To ensure coolant is flowing in the system. Lack of coolant flow may

cause damage to water-cooled guns. Module allows wiring into the peripheral connector port. 50 ft (15.2 m) cable with connector and separate shell connector for simple modification to desired length in the field. It can be mounted on the Auto-Axcess or as desired elsewhere. 1/4-turn quick connection.

Fixed or Hard Automation Accessories

Oscillators and Motorized Cross Slides

Refer to Lit. Index No. AU/6.0.

Manual Welding Guns –

see www.bernardwelds.com or www.tregaskiss.com

Automation welding guns –

see www.tregaskiss.com

Genuine Miller Accessories

Motor Control Cables

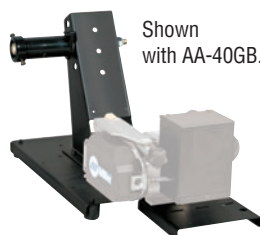
#300 097 20 ft (6.1 m)

#300 096 30 ft (9 m)

#300 098 50 ft (15.2 m)

Includes overmolded connections on high-flex cables for optimal service life.

Volt-Sense Work Cable, 50 ft #208 810

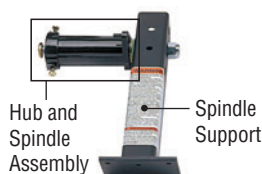


Shown with AA-40GB.

Access® Feeder Base and Spool Support #195 369

Sheet metal construction. Allows mounting of AA-40GB motor (if desired)

when using ROI option or when using an Auto-Axcess with Smart Cable adapter.



Hub and Spindle Assembly #072 094

Spindle Support #092 989



Wire Reel Assembly #108 008



Spool Covers

#057 607

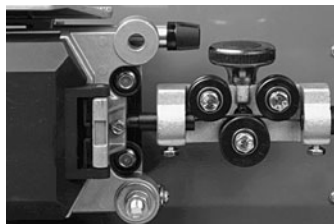
Reel Covers #058 256

For 60 lb (27 kg) coil. Helps to protect the welding wire from dust and other contaminants.

Note: Reel and Spool Covers cannot be installed if the wire drive assembly is in a rotated position.

Turntable Assembly #146 236

Allows rotation of the feeder as the operator changes work positions. Reduces strain and bending on the gun cable.



Wire Straightener

#141 580

For .035–.045 in (0.9–1.1 mm) dia. wire.

#141 581

For 1/16–1/8 in (1.6–3.2 mm) dia. wire.

Helps reduce the cast in wire to improve wire feeding performance and increase the service life of the gun liner and contact tip.

Coolant Systems

For more information, see the Miller Coolant Systems literature sheet, Index No. AY/7.2.



Coolmate™ 3

#043 007 115 VAC

#043 008 230 VAC

For use with water-cooled torches rated up to 600 amps. Unique paddle-wheel indicator, external filter and easy-fill spout.

Coolmate™ V3 #043 009 115 VAC

For use with water-cooled torches rated up to 500 amps. Vertical design conveniently mounts to Miller cylinder rack in place of one cylinder.

Coolmate™ 4 #042 288 115 VAC

For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

Low Conductivity Coolant #043 810

Sold in cases of four 1-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37°F (-38°C) or boiling to 227°F (108°C). Also contains a compound that resists algae growth.

Ordering Information

Learn More at MillerWelds.com/AMS

Automatic Equipment Options*	Stock No.	Description	Qty.	Price
Auto-Access® 300 (Robotic receptacle kit sold separately)	#907 151 #907 151-01-1	190–630 V. Inverter power supply with robotic interface 190–630 V. Inverter power supply, robotic interface, and RMD software upgrade		
Auto-Access® 450 (Robotic receptacle kit sold separately)	#907 153 #907 153-01-1	190–630 V. Inverter power supply with robotic interface 190–630 V. Inverter power supply, robotic interface, and RMD software upgrade		
Auto-Access® 675	#907 155	190–630 V. Inverter power supply with robotic interface		
Auto-Access® Device Net		For Device Net options — consult factory at 1-920-954-3809		
Auto-Access® tandem Systems		For tandem applications consult factory		
Motor/Kit/Cable Options				
Wire Drive Motor Assembly		See page 5		
Motor Control Cable (see page 7)		See page 5 for connection diagram and required cables		
Receptacle/Adapter Kits		See page 6. <i>One required per machine, consult factory</i>		
Palm OS® Based Software Options				
Palm™ Convenience Package	#195 517	Palm model may vary (File Management and WaveWriter software is NOT included)		
Axcess® File Management	#195 249 #300 529	For Palm. File management software (required Palm™ handheld is NOT included) For PC. File management software (PC-based emulator is included)		
WaveWriter™ Wave Shaping	Consult factory Consult factory	For Palm. File management software with wave shaping (required Palm™ handheld is NOT included) For PC. File management software with wave shaping (PC-based emulator is included)		
Software-Based Welding Process Opt.				
RMD™ (Regulated Metal Deposition)	#195 252	Field (required Palm™ handheld or PC based-emulator is NOT included)		
Accessories				
Volt-Sense Work Cable	#208 810	50 ft (15.2 m) cable		
Axcess® Feeder Base and Spool Support	#195 369	Allows mounting of AA-40GB motor when using ROI option		
Hub and Spindle Assembly	#072 094			
Spindle Support	#092 989			
Coolant Systems		See page 7		
Drive Roll Kit (Required)		See page 6		
Inlet/Intermediate Guides		See page 6		
Smart Adapter	#300 012	Robotic/automation. Allows automatic to function as semi-automatic		
Universal Connector for Analog Control	#195 002	Robotic/automation. Allows custom configuration		
Field Application Support	#195 480	Robotic/automation. One day minimum, not subject to discount. See page 6		
Analog Robot Simulator	#195 030	Robotic/automation. See page 6		

Date:

*The Auto-Access is a fully digital machine and utilizes DeviceNet protocol for internal system operation. Select robot manufacturers have created unique software for specific controllers which enable them to communicate digitally with an Axcess power supply. Check with your robot supplier of choice to further understand if there are benefits created by them that can reduce complexity, add value or reduce your total cost of integration and operation. Welding Distributors: you may also inquire with the robot manufacturer about drop-ship programs they may offer for digital or analog versions of the Axcess platform.

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