# **Axcess<sup>®</sup> E Systems**

### Advanced MIG **Welding Systems**



# With Insight™ Weld Data Monitoring System

# 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-Curve™ MIG (GMAW-P) Pulsed MIG (GMAW-P) MIG (GMAW) Metal-cored **RMD®** 

Carbon arc gouging (CAC-A) can also be activated

Rated Output 300: 300 A at 29 VDC, 60% duty cycle

(225 A at 25.3 VDC, 100% duty cycle)

450: 450 A at 36.5 VDC, 100% duty cycle 675: 675 A at 38 VDC, 100% duty cycle

Voltage Range 10-44 V

Auxiliary Power 115 V, 10 A duplex

Net Weight 300: 135 lb. (61.2 kg)

450: 186 lb. (84.4 kg) 675: 238 lb. (108 kg)

### Flexible, Expandable and Upgradeable

Multi-MIG capable welding systems are precise, digitally controlled and software-driven. For additional information see page 6.

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

**Configure the Axcess E** via convenient Web pages using a compliant Web browser (see page 4).

#### Insight weld data monitoring system

provides comprehensive feedback on welding activity and productivity (see pages 2 and 3).



Axcess E 300

#### Field Upgrade Module



Update a standard Axcess power source by installing an Axcess E field upgrade module (see page 10). Not compatible with Auto ROI.



Axcess E four-drive-roll wire drive feeder is combined with an operator interface, leaving no controls back at the power source. Provides positive feeding for the appropriate preprogrammed wire diameters from 50-1.400 ipm. and operates from 40 VDC supplied by Axcess power source.



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



#### Miller Electric Mfg. Co.

An ITW Welding Company 1635 West Spencer Street P.O. Box 1079 Appleton, WI 54912-1079 USA

#### **Equipment Sales US and Canada**

Phone: 866-931-9730 FAX: 800-637-2315 International Phone: 920-735-4554 International FAX: 920-735-4125











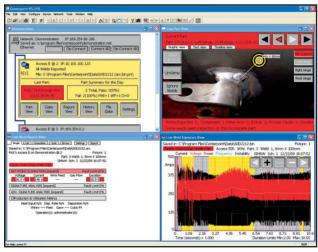
# **Insight Centerpoint™ Weld Process Management System**

Don't just monitor production data, use Insight to provide the information that will create the knowledge you need to improve your welding operation on many levels. When combined with the power of Ethernet connectivity, Miller® Axcess E with Insight provides a comprehensive welding information system. *Insight is embedded into the operating system of the Axcess E*, eliminating the need for external monitoring devices. Simply stated, the Axcess E with Insight provides valuable information that can be used to reduce cost, increase productivity, and enhance quality.

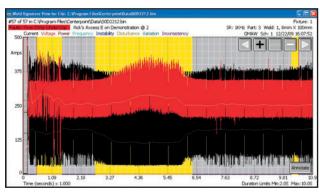
#### **Axcess® E with Insight Centerpoint**

- Streamlines operator training
- Helps the operator apply welds in the correct sequence
- Detects missing or incomplete welds
- Detects under and over welding
- Identifies and addresses recurring quality issues
- Monitors system information and trends to prompt preventative maintenance
- Monitors various welding inputs/outputs to ensure process conformance
- Provides Weld Signature™ with detailed information on welds outside of predetermined limits
- Provides information on faults
- Provides information on wire consumption and gas consumption (optional)
- Provides information by time, by part, by work cell, by shift, and by operator
- Consolidates weld data information for an entire fleet of Axcess E systems via factory Ethernet network

### **Insight Centerpoint Application Examples**



**Administrative View** 



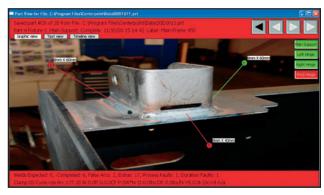
Weld Signature™\* View with Faults Highlighted



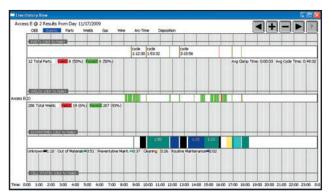
History View - Parts



**HMI View for Operator** 



**Part View with Failures** 



History View - Parts, Welds, Downtime



# **Insight Centerpoint™ Feature Guide**

- Weld Workflow enhances Part Tracking by allowing management to not only govern the application of welds, but to specify and govern what other critical information/functions are presented to the operator/ welder and when.
- Cost calculator is a tool within Centerpoint that allows part and weld costs to be estimated based on measured values and cost variables entered by the user.
- Signature analysis is an advanced weld monitoring mode that provides ability to measure and evaluate peak/background voltage and current, pulse width, pulse frequency, short circuit frequency and power input.
- Weld process production manager can be used to track and alarm for basic preventative maintenance tasks including total wire used, total gas used (requires optional gas flow sensor) total arc time, and total parts.

Insight Centerpoint Feature	Standard Capability	Optional Advanced Capability
Data capture for current, voltage, WFS, and gas (optional)	•	•
Process control — high/low set points	•	
Jobs (central repository for all Part Tracking <sup>™*</sup> info)	•	•
Detects missing, extra, and incomplete welds	•	•
Totalize arc time, wire/gas usage, parts, and welds/time period	•	•
Calculates overall equipment effectiveness	•	•
Weld history extraction (no full-time PC connection)	•	•
Auto learn	•	
Weld Signature™ — low resolution (averages)	•	•
Weld Signature™ — high resolution (1 Khz)		•
Weld Workflow <sup>™</sup>		•
Cost calculator		•
Signature analysis		•
Weld process production manager (WPPM)		•

# **Insight Reporter™ Production Management Reporting System**

Insight Reporter provides the type of enterprise weld production information that can be used to drive your business forward. Insight Reporter provides information via a wide range of preconfigured process, production, and management charts and reports. This information is stored in a SQL server database which contains data from multiple Insight Centerpoint™ sources.

There are two primary components to Insight Reporter: database software and client software. Any Axcess E networked to a PC running Insight Centerpoint can feed weld production process data to the Insight Reporter SQL database software. The Insight Reporter client software is offered on a per-seat license and can be run from any PC on the network with access to the SQL server. Examples of some of the standard reports include:

#### Weld Analysis Charts

- Weld summary
- Welds per time
- Sensor averages
- Process features
- Process featuresFault types

### **Part Analysis Charts**

- Part summary
- Parts per time
- Part faults per time
- Faults on a single partWeld counts per part
- Parts with missing welds
- Single part report

#### **Productivity Charts**

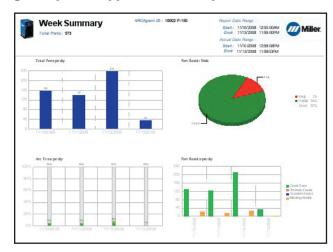
- Arc-efficiency
  CI
- Parts per hour
- Welds per hour
- Downtime analysis
- Cycle time

#### Costing Analysis Charts

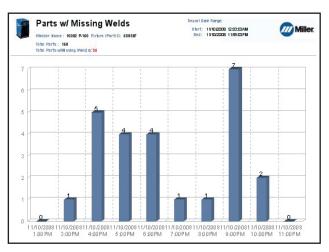
- Wire usage
- Gas usage
- Summary reports
- Available by shift, day, week, month, or year

Note: Insight Reporter requires installation of Insight Reporter SQL database on a networked PC or server.

### **Insight Reporter Application Examples**



Weekly Summary Report



**Parts with Missing Welds Report** 



# **Interface with Axcess® E Via Web Pages**

With a compliant Web browser\* and access to the company's factory network, authorized employees can interface with the Axcess E to change configurations, check settings, define programs, monitor basic functions, troubleshoot the system, and much, much more. In addition, with external

access to the factory network, this can be accomplished from anywhere in the world. The use of Web pages is easy and intuitive, which means the learning curve is short.

\*Internet Explorer 7 or higher, Firefox 3.5 or higher — Java script **must** be enabled.

#### **Web Page Examples**



**Home Page** 

Provides quick access to all Axcess E information and setup screens.



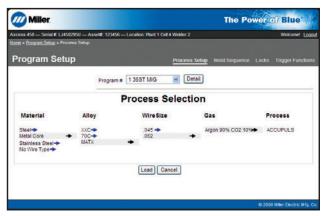
**Weld Sequencer Page** 

Define each attribute of the weld sequence for each program.



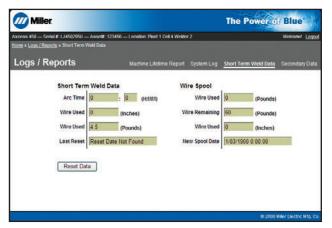
**Custom Dashboard Page** 

Customized view of critical machine information.



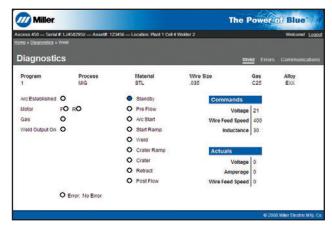
**Process Setup Page** 

Define each of the eight available Axcess E programs.



**Short Term Weld Data Page** 

Get a quick reading of arc time and wire usage since last reset.



**Weld Diagnostics Page** 

Determine the status of internal component performance.



# **Features and Benefits**

#### **HARDWARE** (Standard)

SureStart™

Arc control

Arc adjust

Remote/trigger program select

Power Management Technology	Miller® Auto-Line technology allows for <b>any</b> input voltage hook-up (190–630 V, 50 or 60 Hz) with no manual linking. Assures rock-solid, consistent output on fluctuating primary lines.
Fan-On-Demand™	Cooling system operates only when needed. Reduces amount of airborne contaminants pulled through the machine.
Wind Tunnel Technology™	Circulates air over components that require cooling, not over electronic circuitry, which reduces contaminants and improves reliability in harsh welding environments.
1/4-turn steel connectors	Allow for faster installation of system and eliminates thread stripping.
115 V duplex receptacle	Provides 10-amp 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	Slots cut into the frame for forklift transportation.
Small footprint	All models feature a small footprint, designed to minimize floor space requirements.
Flexible feeding options	Several different wire feeding and operator interface options are available and configurable to desired application.
Connections for Ethernet (2)	Interface with any Axcess E either directly or via the factory Ethernet network.
Connections for USB	USB flash drives can be used for executing code updates.
SOFTWARE (Standard)	
Multi-MIG® capability	Includes common carbon steel, aluminum and stainless welding programs, including Accu-Pulse®, Accu-Curve™, standard or adaptive pulse, conventional MIG, metal-cored, and RMD® (regulated metal deposition) programs using the most popular wire diameters and gas combinations.
Accu-Pulse®/Accu-Curve™	MIG processes that deliver precise control of the arc even over tack welds and in tight corners. Provide optimum

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.

Control offers a simple way to tailor factory pulse weld programs by adjusting the arc plasma cone to accommodate

Allows changing weld programs to take advantage of up to eight programs of Multi-MIG welding process capabilities.

a variety of welding applications without the need for any reprogramming or changing any hardware.

Note: As new and improved software features are developed, they can be added to existing Axcess E systems for FREE. Code transfer is accomplished via a USB memory stick plugged directly into USB connection on the Axcess E.

Allows a simple method that controls arc length for pulse processes.

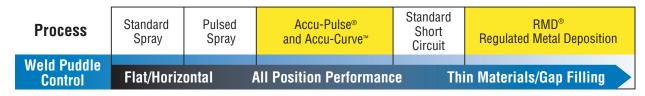
molten puddle control for out-of-position welding.



# Multi-MIG® Process Capability (Through software-based programs.)

Access 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 accessed either at the start of a welding sequence or anywhere in the weld while actually welding by using trigger or remote program select.

For a given wire-feed speed, the chart below shows from left (hottest) to right (coolest) all the possible arc mode transfer ranges of accessible MIG and pulse processes. This shows compatible shielding gas combinations such as  $90 \text{ Ar}/10 \text{ CO}_2$  (90 percent argon and 10 percent carbon dioxide) on steel using the same wire-feed speed and also gives an indication of puddle control characteristics based on arc type selected.

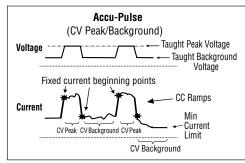


Note: To achieve optimum performance, 4/0 welding power secondary cable is recommended and the supplied work-sense lead must be connected as close to arc as possible.

# **Featured Welding Processes**

#### Accu-Pulse® STANDARD on all Axcess® E models

The 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 percent 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-Curve™ STANDARD on all Axcess® E models

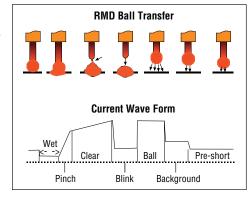
Accu-Curve is a variation of the Accu-Pulse process. The transitions from peaks to background voltage are "curved". The curved transitions provide a "softer" feel without sacrificing the tight arc lengths that allow for better puddle control and have become the hallmark of the Accu-Pulse process.

#### **Benefits**

- "Softer" arc feel than Accu-Pulse
- Maintains tight arc lengths
- Maintains better puddle control

#### RMD® (Regulated Metal Deposition) STANDARD on all Axcess® E models

The RMD process 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.



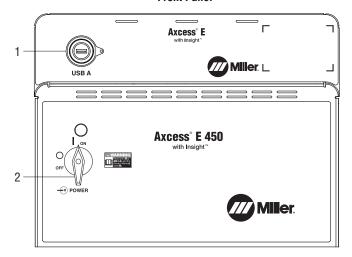
#### **Benefits**

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

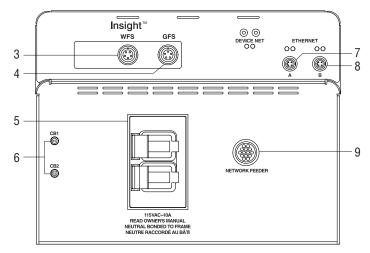


### **Control Panels**

#### **Front Panel**



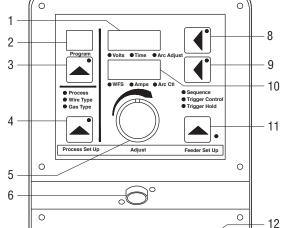
**Rear Panel** 



- 1. USB Connection A (Host)
- 2. Power Switch

- 3. Wire Feed Speed Sensor Conn. (Optional)
- 4. Gas Flow Sensor Connection (Optional)
- 5. 115 V, 10 A Duplex Receptacle
- 6. Circuit Breakers

- 7. Ethernet Connector A
- 8. Ethernet Connector B
- 9. Network Feeder Connector



Axcess E Feeder and Remote Operator Interface (ROI E)

- IS PURGE 7 0 0
- 1. Voltage/Arc Adjust Display Meter
- 2. Program Display
- 3. Program # Select
- 4. Process Setup Button
- 5. Control Knob
- 6. Trigger Receptacle
- 7. On/Off Switch
- 8. Voltage/Arc Adjust Button
- 9. Wire Feed Speed/Arc Control Setup Button
- 10. Wire Speed/Amperage Display Meter
- 11. Feeder Setup Button
- 12. Jog/Purge Switch

### **Capabilities**

**Dual schedule.** Toggle between two program pairs (e.g. 1,2-3,4-5,6-7,8).

4T. When trigger is released, output will operate at different weld parameters.

Trigger program select (TPS). Provides the ability to access any of the Multi-MIG® processes or any of the eight active programs. Trigger dual schedule (TDS). When activated allow selection between predetermined program pairs (e.g. 1,2-3,4-5,6-7,8).

Trigger hold (TH). When activated, allows gun trigger release and continuous welding until trigger is pulled again.

Carbon arc gouging (CAC-A). Can be activated.

#### Sequence

- Preflow: 0.1-10.0 seconds
- Start power: 0.1-10.0 seconds
- Crater: 0.1-10.0 seconds
- Postflow: 0.1-10.0 seconds

Arc adjust - arc length (trim)

**Arc control** — arc force or focus (SharpArc®)

Process selection — Accu-Pulse®, Accu-Curve<sup>™</sup>, pulsed MIG, MIG, metal-cored

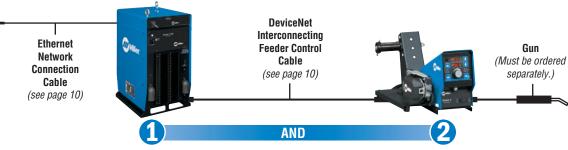


# Typical Installations (Semi-automatic pulsed MIG or conventional MIG.)

The Axcess E platform is designed to provide multiple wire feeding configurations suited to the unique needs of modern manufacturing applications and industries. It utilizes many common components to minimize both part and maintenance complexity. All motors operate on 40 VDC provided by the Axcess E power supply and have a wire feed speed range of 50-1,400 inches per minute. A common operator interface is used on all (see page 7).

#### Standard Installation

A typical bench/sled feeder installation. For use when the feeder is placed on the power supply, a bench or an optional cart.

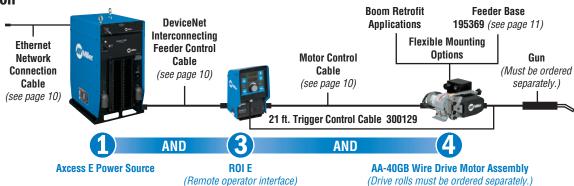


**Axcess E Power Source** 

Axcess E Wire Feeder (Drive rolls must be ordered separately.)

### **ROI Option Installation**

Allows feeder motor drive to be placed away from power supply and operator interface. Ideal for fixed automation applications and updating or replacing equipment on booms or other applications where separate location of power source. ROI, and wire drive motor is desirable.



# Power Source Specifications (Subject to change without notice.)







Model	Rated Output	Voltage Range	Amperage Range	Max. Open- Circuit Voltage		•		Output, 460 V		,		Dimensions	Net Weight
Axcess E 300	300 A at 29 VDC, 60% duty cycle (225 A at 25.3 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: 26.5 in. (673 mm) 450 H: 34.5 in. (876 mm) 675 H: 42.5 in. (1,080 mm) W: 17.094 in. (434 mm)	135 lb. (61.2 kg)
Axcess E 450	450 A at 36.5 VDC, 100% duty cycle	10-44 V	5-600 A	80 VDC	_	60	33.7	28.8	22.8	23.8	22.9	D: 21.75 in. (553 mm)	186 lb. (84.4 kg)
Axcess E 675	675 A at 38 VDC, 100% duty cycle	10-44 V	5-900 A	80 VDC	_	89.7	_	43.7	34.8	35.7	34.4		238 lb. (108 kg)



**⑤** Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

# **Wire Feeder Options**



gun or required **DeviceNet** interconnecting feeder control cable. These must be ordered separately.

Wire feeders do NOT

include drive rolls.

Axcess E Single Feeder 300677 **Axcess E Dual Feeder** 300801

Feeder is designed specifically for Axcess E. Provides single-range control of 50-1,400 inches per minute. Dual-wire model provides the same functionality as single-wire version, but is ideal when two different wire types need to be available at the same time. Digitally communicates with Axcess E power source via DeviceNet interconnecting feeder control cable. Includes 50-foot volt-sense lead.

Model	Gas Valve	Type of Input Power	Connection to Power Source	Wire Feed Speed Range**	Wire Diameter Range	Single Feeder Dimensions	Dual Feeder Dimensions	Net Weight (Feeder only)
Axcess E bench/sled feeder	Included	40 VDC (from Axcess)	DeviceNet interconnecting feeder control cable* (order separately)	50-1,400 ipm (1.3-35.56 mpm)	.035-3/32 in. (0.9-1.6 mm)	H: 14.5 in. (368 mm) W: 12.5 in. (318 mm) D: 27 in. (686 mm)	H: 15 in. (381 mm) W: 19 in. (483 mm) D: 34 in. (863 mm)	Single feeder 46 lb. (21 kg) Dual feeder 87 lb. (39 kg)

<sup>\*</sup>For available lengths visit MillerWelds.com/equiptoweld.

<sup>\*\*</sup>This is the wire feed speed range while using MIG. With pulsed MIG, the wire feed speed range may be more limited.



# **3** ROI (Remote Operator Interface) Options

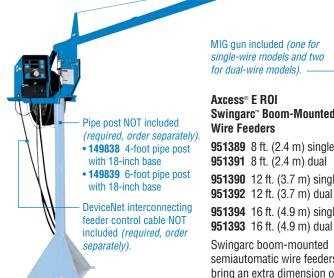
ROI E does NOT include AA-40GB wire drive motor assembly, motor control cable or DeviceNet interconnecting feeder control cable. These must be ordered separately.



#### Single ROI E 300726 **Dual ROI E** 300800

The ROI E allows the Axcess E power supply, wire drive motor assembly and ROI to be located in three separate places. This is desirable for mounting to custom jibs, booms or other extended-reach applications. Since an ROI system can incorporate separate components providing the most flexibility for custom applications, it's an ideal way to obtain the many benefits of the Axcess E while retaining an existing boom or other structural asset. The dual ROI provides the same functionality as the single, but controls two separate wire drive motor assemblies. Four programs are available per side.

Note: For non-Miller boom and jib mounting, see ROI E installation diagram on page 8 and select desired cable lengths.



MIG gun included (one for single-wire models and two for dual-wire models).

Axcess® E ROI Swingarc™ Boom-Mounted Wire Feeders

951389 8 ft. (2.4 m) single 951391 8 ft. (2.4 m) dual

951390 12 ft. (3.7 m) single 951392 12 ft. (3.7 m) dual

**951394** 16 ft. (4.9 m) single

Swingarc boom-mounted semiautomatic wire feeders

bring an extra dimension of flexibility and efficiency to high-production MIG welding stations. You get an effective solution that maximizes output, especially when dealing with large weldments and hard-to-reach places.

#### Trigger Control Cable 300129

21 ft. (6.4 m). Required when retrofitting non-Miller booms with an ROI option.

Model	Type of Input Power	Connection to Motor	Connection to Power Source	Single ROI E Dimensions	Dual ROI E Dimensions	Net Weight
ROI E	Supplied from power source — 40 VDC (motor), 24 VDC (interface)	Motor control cable* (order separately)	DeviceNet interconnecting feeder control cable* (order separately)	H: 13 in. (330 mm) W: 7 in. (178 mm) D: 7 in. (178 mm)	H: 13 in. (330 mm) W: 9 in. (229 mm) D: 10 in. (254 mm)	Single ROI E 10.5 lb. (4.8 kg) Dual ROI E 13 lb. (5.9 kg)

<sup>\*</sup>For available lengths visit MillerWelds.com/equiptoweld.

# 4 Wire Drive Motor Assembly Options (To be used with ROI.)

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** 195426 Left-hand drive 195515 Right-hand drive

The AA-40GB wire drive motor assembly with over current protection (OCP) 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-foot volt-sense cable.

Model	Gas Valve	Type of Input Power	Connection to ROI E	Wire Feed Speed Range**	Wire Diameter Range	Dimensions	Net Weight
AA-40GB	Included and enclosed	40 VDC (from Axcess E)	Motor control cable* (order separately)	50-1,400 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)	16.5 lb. (7.5 kg)

<sup>\*</sup>For available lengths visit MillerWelds.com/equiptoweld.

<sup>\*\*</sup>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 four drive rolls, necessary quides and feature an anti-wear sleeve for inlet quide.

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)	"U" groove for aluminum wires contains nylon guides
.035 in. (0.9 mm)	151026	_	151052	_	243233
.040 in. (1.0 mm)	161190	_	_	_	_
.045 in. (1.1/1.2 mm)	151027	151037*	151053	151070	243234*
.052 in. (1.3/1.4 mm)	151028	_	151054	_	_
1/16 in. (1.6 mm)	151029	151039	151055	151072	243235
.068/.072 in. (1.8 mm)	_	_	151056	_	_
5/64 in. (2.0 mm)	_	_	151057	_	_
3/32 in. (2.4 mm)	_	151041	151058	_	_

<sup>\*</sup>Accommodates .045- and .047-inch (3/64-inch) wire.

#### **Nylon Wire Guides for Feeding Aluminum Wire**

Wire Size	Inlet Guide	Intermediate Guide
.035 in. (0.9 mm)	221912	242417
.047 in. (1.2 mm)	221912	205936
1/16 in. (1.6 mm)	221912	205937

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

#### **Wire Guides**

Wire Size	Inlet Guide	Intermediate Guide
.023040 in. (0.6-1.0 mm)	221030	149518
.045052 in. (1.1-1.4 mm)	221030	149519
1/16-5/64 in. (1.6-2.0 mm)	221030	149520
3/32-7/64 in. (2.4-2.8 mm)	229919	149521

### **Genuine Miller® Services and Accessories**

### **Consulting Services**

#### Field Application Support 195480

Axcess® E 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 technology experts. Contact the factory with questions. Factory support is available at a flat rate of \$1,250.00 per day (plus expenses) when scheduled more than 10 days in advance. With less than 10-day notice, rates may be higher. Rates are based on a 10-hour day, including travel. One day minimum.



#### Axcess® E Field Upgrade Module 300641 Field

Upgrade your investment in standard Axcess equipment. Upgrade module upgrades standard Axcess power sources to Axcess E systems. This module comes with everything you need for installation.

Note: Not compatible with Auto ROI.

### DeviceNet Interconnecting Feeder

**Control Cables\* 242209005** 5 ft. (1.5 m)

242209010 10 ft. (3 m)

**242209025** 25 ft. (7.6 m)

**242209050** 50 ft. (15.2 m)

These specially designed electrical magnetic interference (EMI) protected and shielded feeder control cables are required, but not included with Axcess feeders or ROI. Determine length needed and order separately.

\*For additional lengths visit MillerWelds.com/equiptoweld.

#### **Motor Control Cables\***

**242395010** 10 ft. (3 m)

**242395020** 20 ft. (6.1 m)

**242395030** 30 ft. (9 m)

**242395050** 50 ft. (15.2 m)

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

\*For additional lengths visit MillerWelds.com/equiptoweld.

#### **Volt-Sense Cable\***

**242212050** 50 ft. (15.2 m)

Replacement cable. One cable supplied with every feeder or drive motor.

\*For additional lengths visit MillerWelds.com/equiptoweld.

#### **Ethernet Network Connection Cables**

300734 9.8 ft. (3 m)

**300735** 16.4 ft. (5 m)

**300736** 32.8 ft. (10 m)

Industrial-grade 360-degree-shielded Cat 5
Ethernet cable with conventional RJ45
overmolded four-pole connector on one end to
connect to factory network, and industrial M12
overmolded connector on the other end to
attach to Axcess E power source. Cable supports
10/100 Mbits-per-second transmission rate.



# **ADAM DI/O Module 300803** Provides a digital I/O interface

for communication between a robot /PLC and the Axcess E power supply. The interface allows for the interaction of a robot or PLC and the Insight Centerpoint application. This module is **optional** for semi-automatic Axcess E models.

**Axcess® E Sourcing I/O Kit 301150** For Axcess E and Auto-Axcess™ E.



### **Genuine Miller® Accessories**



#### Running Gear Cylinder Rack 300408

Fits Axcess E 300 and 450 models. Holds two large gas cylinders and has gun cable hangers and a consumable drawer in front for easy access. A convenient handle allows the cart to be pulled easily through doorways. System components including power source and single or dual feeders can be mounted to the cart and secured.



#### Industrial MIG 4/0 Kit 300390

Consists of flowmeter regulator with 10-foot (3 m) gas hose, 10-foot (3 m). 4/0 feeder weld cable with lugs, and 15-foot (4.6 m) work cable with 600-amp C-clamp.

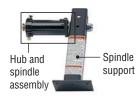


Insight LTD Gun 3DM4015-45Q Gun provides built-in controls for Insight Centerpoint.™



Axcess® E
Feeder Base
and Spool
Support
195369
Sheet metal
construction.
Allows mounting
of AA-40GB

motor (if desired) when using ROI option.



Hub and Spindle Assembly 072094

Spindle Support 092989



Spool Cover 057607



Wire Reel Assembly 108008

#### Reel Cover 195412

For 60-pound (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 146236

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

**Hanging Bail (Electrically Isolated) 058435** Used for suspending feeder over work area.



#### Wire Straightener

**141580** For .035–.045 in. (0.9–1.1 mm) wire. **141581** For 1/16–1/8 in. (1.6–3.2 mm) 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 literature No. AY/7.2.



Coolmate™ 3
043007 115 V
043008 230 V
For use with watercooled torches rated up
to 500 amps. Unique
paddle-wheel indicator,
external filter and easyfill spout.



Coolmate™ 4
042288 115 V
For use with watercooled torches rated up
to 600 amps. Tough
molded polyethylene
case with carrying
handle.

#### Low-Conductivity Coolant 043810

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



# **Ordering Information**

Semi-Automatic Equipment Options	Stock No.	Description	Qty.	Price
Axcess® E 300	907440	Power source only		
Axcess® E 450	907439	Power source only		
Axcess® E 675	907441	Power source only		
Axcess® E Field Upgrade Module	300641	Field. Upgrades standard semi-automatic power source to Axcess E. Not compatible with Auto ROI		
Software				
Insight Software Upgrade	301257	Advanced capability upgrade		
Insight Centerpoint™	301255 301256	Version 9.0 single license Version 9.0 site license		
Insight Reporter™	300709	Management reporting system client software		
Insight Reporter™ SQL Database	300710	Management reporting system database software (one required per server)		
Wire Feed Options (see page 8 and 9)		See page 8 for connection diagram and required cables		
Axcess® E Feeder	300677 300801	Single-wire feeder. Order DeviceNet interconnecting feeder control cable separately Dual-wire feeder. Order DeviceNet interconnecting feeder control cable separately		
ROI E (Remote Operator Interface)	300726 300800	Single-wire model Dual-wire model		
Axcess® E ROI Swingarc™ Boom	951389 951391 951390 951392 951394 951393	Single, 8 ft. (2.4 m) boom Dual, 8 ft. (2.4 m) boom Single, 12 ft. (3.7 m) boom Dual, 12 ft. (3.7 m) boom Single, 16 ft. (4.9 m) boom Dual, 16 ft. (4.9 m) boom		
AA-40GB Wire Drive Motor Assembly	195426 195515	Left-hand wire drive assembly Right-hand wire drive assembly		
Drive Roll Kit (Required) and Guides		See page 10		
Installation Cables				
Trigger Control Cable (21 ft./6.4 m)	300129	See page 9. See page 8 for connection diagram		
DeviceNet Communication Cables		See page 10. See page 8 for the connection diagram		
Motor Control Cable		See page 10. See page 8 for the connection diagram		
Volt-Sense Cable (50 ft./15.2 m)	242212050	Included with drive motor. See page 10		
Ethernet Network Connection Cables		See page 10. See page 8 for the connection diagram		
Services and Accessories				
Field Application Support	195480	One day minimum, not subject to discount. See page 10		
ADAM DI/O Module	300803	Optional for semi-automatic Axcess E models		1
Axcess® E Sourcing Kit	301150			1
Running Gear Cylinder Rack	300408	For 300 and 450 models only. Holds two cylinders, cooler, machine and feeder		1
Industrial MIG 4/0 Kit	300390	Includes flowmeter regulator with 10 ft. (3 m) gas hose, 10 ft. (3 m) 4/0 feeder weld cable with lugs, and 15 ft. (4.6 m) work cable with 600-amp C-clamp		
Insight LTD Gun	3DM4015-45Q	Gun provides built-in controls for Insight Centerpoint™		
Axcess® E Feeder Base/Spool Support	195369	Allows mounting of AA-40GB motor when using ROI option		
Hub and Spindle Assembly	072094	·	1	1
Spindle Support	092989			
Wire Reel Assembly	108008		1	
Spool Covers	057607			1
Reel Covers	195412			1
Turntable Assembly	146236			1
Hanging Bail (Electrically Isolated)	058435			1
Wire Straightener		See page 11		
Coolant Systems		See page 11		1

Date: Total Quoted Price:

Distributed by:

