Issued Dec. 2010 • Index No. DC/8.0

**Digital Semi-Automatic MIG Welding Systems** 



# **Axcess**<sup>®</sup> **Systems** Software Driven Multi-MIG® Process Platform

#### Manufacturing **Applications**

## Quick **Specs**

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

#### **Processes** Multi-MIG<sup>®</sup>

Accu-Pulse® MIG (GMAW-P) - Accu-Curve - Accu-Speed<sup>™</sup> Optional Pulsed MIG (GMAW-P) MIG (GMAW) Metal Core RMD<sup>™</sup> (GMAW-SCT) Optional Carbon Arc Gouging (CAC-A) can also be activated

FREE TRIAL! See page 2 for details Accu-Speed<sup>™</sup> (GMAW-P) RMD<sup>™</sup> (GMAW-SCT)

#### **Rated Output**

300: 300 A at 29 VDC, 60% Duty Cycle (225 A at 23.5 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 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<sup>®</sup>.

## Flexible, Expandable and Upgradeable

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

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

Axcess four-drive-roll wire drive feeder is combined with operator interface leaving no controls back at the power source.

Several different wire feeding and operator interface options are available and configurable to desired application.

"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<sup>™</sup> handheld (PDA).

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

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



Package shown



Power source and wire feeder are warranted for 3 years, parts and labor. Original main power rectified parts are warranted for 5 years. Gun warranted for 90 days, parts and labor.



Build your own system at MillerWelds.com/equiptoweld or see the Stationary and MIGRunner Packages (pg 8).

## 

Miller's patented technology allows for any input voltage hook-up (208-575 V) with no manual linking. Assures rock-solid, consistent output on fluctuating primary lines.

Fan-On-Demand<sup>™</sup> only operates when needed, cooling internal components.

Wind Tunnel Technology<sup>™</sup> 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.

Forklift slots cut into the frame for forklift transportation.

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





Miller Electric Mfg. Co. An Illinois Tool Works Company 1635 West Spencer Street Appleton, WI 54914 USA

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

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

Web Site www.MillerWelds.com



## **Features and Benefits**

SOFTWARE (Standard)	FREE Hour Trial of Accu-Speed" and RMD" with Every New Axcess Power Supply
Multi-MIG® capability	Includes common carbon steel, aluminum and stainless welding programs, including patented Accu-Pulse®, Accu-Curve <sup>™</sup> and Accu-Speed <sup>™</sup> (optional), standard or adaptive pulse, conventional MIG and metal core programs, and RMD <sup>™</sup> Regulated Metal Deposition (optional) 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 Axcess-able software	Accu-Speed <sup>™</sup> and RMD <sup>™</sup> , Axcess file management system, and WaveWriter <sup>™</sup> pulse wave shaping.

#### Multi-MIG<sup>®</sup> Process Capability — Through Software-Based Programs

"Axcess<sup>®</sup>" 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 "Axcess"-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-Curve™ <i>Accu-Speed™ (Optional)</i>	Standard Short Circuit	RMD™ Regulated Metal Deposition (Optional)
Weld Puddle Control	Flat/Horiz	ontal <i>I</i>	All Position Performanc	e Th	in Materials/Gap Filling

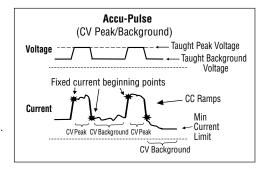
*Note: To achieve optimum performance, 4/0 welding power secondary cable is recommended and the supplied work-sense lead must be connected as close to arc as possible.* 

For a given wire-feed speed, the chart below shows from left (hottest) to right (coolest) all the possible arc mode transfer ranges of "Axcess"-able MIG processes. This shows compatible spray gas combinations such as 90 Ar/10  $CO_2$  (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-PUISE® STANDARD on all Axcess 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-Curve™ *standard* on all Axcess 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.

Note: Accu-Curve can be added to existing Axcess 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 Axcess.

#### Benefits

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



## **Optional Software-Based Welding Processes**

#### Accu-Speed™

Field#300 719For Palm (Required Palm handheld with data card slot is NOT included.)Field#300 720For PC (PC-based emulator and cable are NOT included.)

#### Note: Serial # must be provided for field installation. Factory-installed software can be ordered as a combonumber option with power supply. See power source stock number listings on page 8.

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.

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

#### RMD<sup>™</sup> (Regulated Metal Deposition)

Field#195 252For Palm (Required Palm handheld with data card slot is NOT included.)Field#300 721For PC (PC-based emulator and cable are NOT included.)

Note: Serial # must be provided for field installation. 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 Axcess.

# Current Wave Form

**RMD Ball Transfer** 

#### 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

#### **Benefits**

- Well 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 Axcess<sup>®</sup>-related programs
- Minimize distortion
- Use larger diameter wire on thin materials

## **Optional File Management Software**

#### **Axcess® File Management**



**#300 529 For PC** (Includes PC-based emulator, USB cable and USB flash drive with File Management software.)

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

#### There are 3 basic types of files:

- 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<sup>™</sup> torch length allowing for pushbutton feed of an exact wire length.
- 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 "Axcess"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 Axcess File Management, WaveWriter<sup>™</sup>, and RMD<sup>™</sup> welding process.

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

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



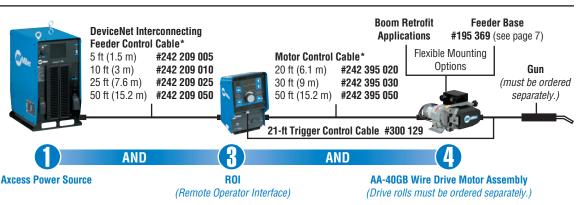
## Typical Installations (Semi-Automatic Pulsed MIG or Conventional MIG)

The Axcess 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 power supply and have a wire feed speed range of 50–1400 inches per minute. A common operator interface is used on all (see page 6).

#### DeviceNet Interconnecting **Standard Installation** Feeder Control Cable\* \*Custom cable lengths A typical bench/sled feeder 5 ft (1.5 m) #242 209 005 are available through Gun installation. For use when 10 ft (3 m) #242 209 010 Equip to Weld<sup>™</sup> in 5 ft (comes #242 209 025 25 ft (7.6 m) the feeder is placed on the increments up to 50 ft with feeder.) #242 209 050 50 ft (15.2 m) power supply, a bench or and 10 ft increments an optional cart. up to 100 ft. AND Axcess Wire Feeder (Drive rolls must be ordered separately.) **Axcess Power Source**

#### **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			t Rated 400 V		-			Dimensions	Net Weight
Axcess 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: 23 in (584 mm) 450 H: 31 in (787 mm) 675 H: 39 in (991 mm) W: 17 in (432 mm)	116 lb (52.6 kg)
Axcess 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: 22-1/2 in (572 mm)	163 lb (73.9 kg)
Axcess 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 by Canadian Standards Association to both the Canadian and U.S. Standards.

## **2** Wire Feeder Options



Wire feeders do NOT include drive rolls or required DeviceNet Interconnecting Feeder Control Cable. These must be ordered separately.

#### Axcess Single Feeder #195 182 Axcess Dual Feeder #195 325

Feeder is designed specifically for Axcess. Provides singlerange control of 50–1400 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 power source via DeviceNet Interconnecting Feeder Control Cable.

Model	Gas Valve	Type of Input Power	Connection to Power Source	Wire Feed Speed Range**	Wire Diameter Range	Single Feeder Dimensions	Dual Feeder Dimensions	Ship Weight
Axcess Bench/Sled Feeder	Included	40 VDC (from Axcess)	DeviceNet Interconnecting Feeder Control Cable* (Order separately)	50–1400 IPM (1.3–35.56 MPM)	.035 – 3/32 in (0.9 – 2.4 mm)	H: 14-1/2 in (368 mm) W: 12-1/2 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 49 lb (22 kg) Dual Feeder 124 lb (56 kg)

\*Custom cable lengths are available through Equip to Weld<sup>™</sup> in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.

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



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

ROI does NOT include AA-40GB Wire Drive Motor Assembly, Motor Control Cable or DeviceNet Interconnecting Feeder Control Cable. These must be ordered separately.



#195 433

The ROI allows the Axcess power supply, wire

to be located in three separate places. This is

drive motor assembly and operator interface (ROI)

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 appli-

benefits of the Axcess while retaining an existing

boom or other structural asset. The dual-wire ROI

assemblies. Four programs are available per side.

ROI installation diagram on page 4 and select desired

provides the same functionality as the single,

but controls two separate wire drive motor

Note: For non-Miller boom and jib mounting, see

cations, it's an ideal way to obtain the many

**Dual ROI** 

cable lengths.





Auto ROI back panel showing connections for input and output signals.

#### Auto ROI #195 239\*

(Contact Applications for assistance at 920-954-3809 prior to any new installation.) The Auto ROI is to be used with an Axcess power supply with the E-Stop option. Provides functionality of the ROI, but replaces sequence and trigger functions with two programmable inputs and outputs. To be used in simple dedicated/fixed/hard automation applications. Features arc established output. Includes 30 ft cable for wiring to other external devices.

\*Requires Axcess power supply with E-Stop function option. E-Stop is not intended for continuous interruption applications. Axcess systems require approximately 30 seconds to reboot or come back online after recovering from an E-Stop condition.

Note: For non-Miller boom and jib mounting, see ROI installation diagram on page 4 and select desired cable lengths.



DeviceNet Interconnecting Cable NOT included (required, order separately).

## $\textbf{Axcess}^{\circ}$ ROI Swingarc $^{\rm \tiny M}$ Boom-Mounted Wire Feeders

#951 383 8 ft (2.4 m) Single-Wire
#951 384 12 ft (3.7 m) Single-Wire
#951 385 16 ft (4.9 m) Single-Wire
#951 386 8 ft (2.4 m) Dual-Wire
#951 387 12 ft (3.7 m) Dual-Wire
#951 388 16 ft (4.9 m) Dual-Wire
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.

#### Dual Swingarc Retrofit Kit #300 032

Kit is required when replacing motors on older Miller Dual 60 Series Swingarc booms. Provides all of the Axcess benefits, but maintains existing dual-boom hardware.

#### 21-ft Trigger Control Cable #300 129

Required when retrofitting non-Miller booms with an ROI option.

Model	Type of Input Power	Connection to Motor	<b>Connection to Power Source</b>	Single ROI Dimensions	Dual ROI Dimensions	Ship Weight
ROI	Supplied from power source	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 12 lb (5.4 kg) Dual ROI 15 lb (6.8 kg)

\*Custom cable lengths are available through Equip to Weld™ in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.

## **Wire Drive Motor Assembly Options** (To be used with Remote Operator Interface.)



#### 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 cable.

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

Model	Gas	Type of Input	Connection to	Wire Feed	Wire Diameter	AA-40GB	Ship
	Valve	Power	Power Source	Speed Range**	Range	Dimensions	Weight
AA-40GB	Included and enclosed	40 VDC (from Axcess)	Motor Control Cable* (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)

\*Custom cable lengths are available through Equip to Weld™ in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.

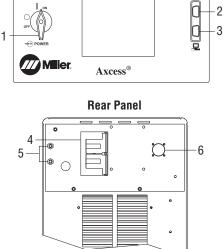
\*\*This is the wire feed speed range while using MIG. With Pulsed MIG, the wire feed speed range may be more limited.



## **Control Panels**



- 2. Handheld
- RS-232 Port
- 3. PC-Communication RS-232 Port
- **4.** 115 VAC, 10 A
- Duplex Receptacle
- 5. Circuit Breakers
- 6. Network Feeder Connector

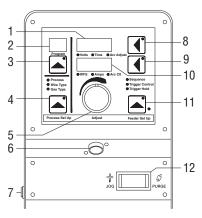


Front Panel



- Voltage Setup Button
   Wire Speed Setup
- Button
- 10. Wire Speed/Amperage Display Meter
- **11.** Feeder Setup Button
- 12. Jog/Purge Switch

Single Axcess Feeder and Remote Operator Interface (ROI)



#### **Capabilities**

**Dual Schedule** — Toggle between two settings using a single wire.

**4T**— When trigger is released, output will operate at different ranges.

**Trigger Program Select (TPS)**— Provides the ability to "Axcess" any of the Multi-MIG<sup>®</sup> 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 (in seconds)

- Preflow: 0.1-5 s Crater: 0.1-5 s
- Start Power: 0.1-5 s Postflow: 0.1-5 s

Arc Adjust — Arc length (Trim)

Arc Control — Arc force or focus (SharpArc®)

Process Selection — Accu-Pulse<sup>®</sup>, Pulsed MIG, MIG, Metal Core, RMD<sup>™</sup> (Optional)

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

**Drive Roll Kits** 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

\*\*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
.023040 in (0.6-1.0 mm)	#150 993	#149 518
.045052 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 Accessories**

#### **Consulting Services**

#### Field Application Support #195 480

Axcess systems may require factory-trained technical support depending on the complexity of the application and the local availability and capability of gualified welding engineers. 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.

#### **DeviceNet Interconnecting Feeder Control Cables**

#242 209 005 5 ft (1.5 m) #242 209 010 10 ft (3 m) #242 209 025 25 ft (7.6 m) #242 209 050 50 ft (15.2 m)

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

Note: Custom cable lengths are available through Equip to Weld<sup>™</sup> in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.

#### **Motor Control Cables**

#242 395 020 20 ft (6.1 m) #242 395 030 30 ft (9 m) #242 395 050 50 ft (15.2 m)

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

Note: Custom cable lengths are available through Equip to Weld<sup>™</sup> in 5 ft increments from 5 to 50 ft, and 10 ft increments from 60 to 100 ft.

#### Volt-Sense Work Cable, 50 ft #242 212 050

Note: Custom cable lengths are available through Equip to Weld<sup>™</sup> in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.



#### **Running Gear Cylinder** Rack #300 408

For Axcess 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, single- or dual feeders, and Coolmate<sup>™</sup> V3 can be mounted to the cart and secured.



Industrial MIG 4/0 Kit #300 390 Consists of Smith® regulator/flowmeter with 10 ft (3 m)

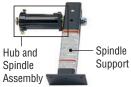
gas hose, 10 ft (3 m). 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.



#### Axcess<sup>®</sup> Feeder Base and Spool Support #195 369

Allows mounting of AA-40GB motor (if desired) when using ROI option or when

using an Auto-Axcess with Smart Cable adapter.





Wire Reel Assembly #108 008

#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.

#### Hanging Bail (Electrically Isolated) #058 435

Used for suspending feeder over work area.



#### Wire Straightener

#141 580 For .035-.045 in (0.9-1.1 mm) wire. **#141 581** 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.

Sheet metal construction.

### Hub and Spindle Assembly #072 094

Spindle Support #092 989



**Spool Covers** 

#### **Dual Schedule Switches**



DSS-8 #079 693 A 15 ft. two-position

trigger switch which attaches to the gun handle and is used in place of the standard trigger for dual scheduling.

#### Adapter Cord #157 364

Required for use with DSS-8. 1ft, Y trigger cable that connects DSS switch and control box to the gun.



DSS-9M #041 793 A 15 ft. two-position slide switch

which attaches to the gun handle and is used to select the desired welding condition for dual schedule purposes. The gun trigger operates as a standard trigger.

#### **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**

Semi-Automatic Equipment Options	Stock No.	Description	Qty.	Price
Axcess® 300	#907 150 #907 150 00 1	Power source only		
	#907 150-00-1 #907 150-01-1	Power source with Accu-Speed™ software upgrade Power source with RMD™ software upgrade		
Axcess® 450	#907 152	Power source only		
	#907 152-00-1	Power source with Accu-Speed <sup>™</sup> software upgrade		
	#907 152-01-1	Power source with RMD <sup>™</sup> software upgrade		
Axcess® 675	#907 154	Power source		
Avances 200 Stationary Pookago	#907 154-00-1 #951 227	Power source with Accu-Speed <sup>™</sup> software upgrade Power source, bench feeder, Bernard <sup>®</sup> Q-Gun <sup>™</sup> , and Industrial MIG 4/0 kit		
Axcess® 300 Stationary Package Axcess® 300 MIGRunner™ Package	#951 227	Power source, bench feeder, Bernard® Q-Gun <sup>®</sup> , Industrial MIG 4/0 kit and		
ALESS SUU MIGHUIIIEI FALKAYE	#931 220	running gear/cylinder rack		
Axcess® 450 Stationary Package	#951 229	Power source, bench feeder, Bernard <sup>®</sup> Q-Gun <sup>™</sup> , and Industrial MIG 4/0 kit		
Axcess® 450 MIGRunner™ Package	#951 228	Power source, bench feeder, Bernard® Q-Gun", Industrial MIG 4/0 kit and		
		running gear/cylinder rack		
Note: Other power sources are available	. Consult factory a	tt 1-920-954-3809 for power sources with E-Stop option.		
Wire Feeder Options (see page 4)				
Axcess® Single Feeder	#195 182	Bench/skid feeder — order DeviceNet Interconnecting Feeder Control Cable separately		
Axcess® Dual Feeder	#195 325	Bench/skid feeder — order DeviceNet Interconnecting Feeder Control Cable separately		
ROI Options (see page 5)				
Single ROI	#195 238	See page 4 for connection diagram and required cables		
Dual ROI	#195 433	See page 4 for connection diagram and required cables		
Auto ROI (see note above)	#195 239	See page 4 for connection diagram and required cables.		
Avenue DOL Curingerer Deem		Requires power source with E-Stop option — consult factory at 1-920-954-3809		
Axcess® ROI Swingarc™ Boom	#300 032	See page 5 for various models		
Dual Swingarc <sup>™</sup> Retrofit Kit	#300 032	Required when replacing motors on older Dual 60 Series Swingarc booms		
Wire Drive Assembly Opt. (see page 5)				
AA-40GB Wire Drive Motor Assembly		New-style wire drive assembly. See page 4 for connection diagram and required cables		
Control Cables (see page 7)		See page 4 for connection diagram and required cables		
Optional Software-Based Welding Processes				
Accu-Speed <sup>™</sup>	#300 719	For Palm. Field (required Palm <sup>™</sup> handheld is NOT included)		
	#300 720	For PC. Field (required PC-based emulator and cable are NOT included)		
RMD <sup>™</sup> (Regulated Metal Deposition)	#195 252	For Palm. Field (required Palm <sup>™</sup> handheld is NOT included)		
	#300 721	For PC. Field (required PC-based emulator and cable are NOT included)		
Optional File Management Software				
Axcess® File Management	#300 529	For PC. File management software (PC-based emulator is included)		
WaveWriter™ Wave Shaping	Consult factory	For PC. File management software with wave shaping (PC-based emulator is included)		
Accessories				
Drive Roll Kit <i>(Required)</i>		See page 6		
nlet/Intermediate Guides		See page 6		
Field Application Support	#195 480	One day minimum, not subject to discount. See page 7		
Volt-Sense Work Cable	#242 212 050	50 ft (15.2 m) cable. Custom cable lengths are available through Equip to Weld™ in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft		
Running Gear Cylinder Rack	#300 408	Holds two cylinders, cooler, machine and feeder		
ndustrial MIG 4/0 Kit	#300 390	Includes Smith regulator/flowmeter 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		
Axcess® Feeder Base and Spool Support	#195 369	Allows mounting of AA-40GB motor when using ROI option		
Hub and Spindle Assembly	#072 094			1
Spindle Support	#092 989			
Additional Feeder Accessories		See page 7		
Dual Schedule Switches		See page 7		
Coolant Systems		See page 7		



Distributed by: