

IF IT TOUCHES THE WIRE, THE WIZARD HAS A SOLUTION!

WIRE DELIVERY PRODUCTS & WELDING PERIPHERALS













PATERBALLS TORGIPRODUCTS



PROUDLY MADE

HIGH PE

HIGH PERFORMANCE MIG WELDING GUNS

Wire Wizard® Welding Products is proud to introduce a new line of high performance PowerBall® Industrial MIG Welding Guns. Utilizing our patented and proven consumables design, PowerBall® MIG guns are engineered to provide maximum conductivity with increased consumable life. Higher conductivity & energy efficiency means less heat build-up in the gun, keeping your hands cool and reducing the time required for heat dissapation. Both semi-automatic and robotic MIG guns are available. PowerBall® welding guns – A new standard for GMAW performance!



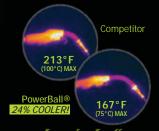
Ergonomic Design



Adjustable Trigger Pull



Proven Consumables



Superior Cooling





LONG LIFE OUTLASTS OTHER TIPS BY UP TO 5X+1

PowerBall® Torch Tips & Diffusers provide an all-copper wire pathway for maximum conductivity and performance. Boost the power of your torch with PowerBall® Tips & Diffusers! High performance torch nozzles also available. Patent pending design.









Extended outer jacket minimizes gas loss Helically wound elliptical wire liner PATENT PENDING

E-Power® Torch Liners are designed to provide superior feedability with low wire skid friction. Made with a helically wound elliptical wire with a proprietary coating that both reduces friction and wire shaving. The result is a long lasting torch liner that reduces costly downtime caused by wire feeding issues.



WELDERS CAN FEEL, HEAR & SEE THE DIFFERENCE!



SCAN HERE FOR THE POWERBALL TORCH PRODUCTS CATALOG

SOLVING WELDING CHALLENGES & MANUFACTURING INNOVATIVE WELDING PRODUCTS SINCE 1985

Wire Wizard® Welding Products is recognized as the industry leader in weld wire delivery products, high performance torch products, weld cell support equipment and weld cell optimization. Since we began in 1985, we've prided ourselves on both quality and innovation. Our product lines include Wire Wizard® Wire Delivery Equipment, Blue Magic® Anti-spatter, PowerBall® Torch Products, Torch Wizard® Nozzle Cleaning Stations and WizardGear® Robot Cable Management Systems. Wire Wizard® has solutions for virtually every arc welding application, including robotic, semi-automatic, automatic and submerged arc welding. *If it Touches the Wire, the Wizard has a Solution!*



ELCo Headquarters in Jackson, Michigan

Fiber Drum Dispensing Equipment Standard & Environmental Drum Hoods Reusable Drum Inner Core Wire Presence Sensing Block/Switch Orbital Arm Kits Direct Pull Kit Fiber Drum Hood Cross-Reference Table Fire Resistant Drum Covers	4-5 4-5 4-5 4-5 . 6
Non-stop™ Wire Dispensing Systems	. 8-9
Wood Reel & Stem Pack Dispensing Wire Guide Arm Units	. 12
Wire Wizard Guide Module System®	14-18
Conduits, Connectors, Cable Management Polymer Conduit Extra Flexible Conduit Extreme Flex Conduit Conduit Connectors Conduit Size Reference Chart WizardGear™ Cable Management Retractable Conduit Balancers & Hangers Replacement Ferrules Adapter Fittings Quick Disconnects	20 21 22 23 24-25 25 26
Inlet Guides Female Threaded Inlet Guides Inlet Guide Adapters Inlet Guides with Quick Disconnects Connector Liners Inlet Guide Cross-Reference Table	28 29 29
Wire Straighteners	31
Wire Pilot® Feed Assist	32-34
Wizard B00M!™ Welding Booms	35

Anti-Spatter & Accessories Blue Magic® Anti-Spatter Solution Blue Chill® Anti-Spatter Solution Rust Inhibitor Additive 5-Gallon Manifold Kit Drum Manifold Kit Anti-Spatter Bowl Hand Held Spray Unit	
Torch Equipment Torch Wizard® Nozzle Cleaning Stations Reamer Blades	
Weld Central™ Process Optimization System	m 42–43
Gas Savers & Gas Flow Measurement Gas Flow Monitors & Gauges	
Drum & Reel Handling Equipment Fiber Drum Dollies Fiber Drum Staging Cart Drum Lifters and Fork Lift Attachments. Heavy Duty Wood Reel Staging Cart Environmental Pack Dollies	
Maintenance Equipment Wire Speed Sensor	
Wire Delivery Kit Configuration Examples	50
WeldCOP™ Weld Cell Optimization Program	51
Dry Ice Cleaning Equipment	52
Alpha-Numeric Parts Index	53-54
Shipping Information In	side Back Cover









FIBER DRUM HOODS AND ACCESSORIES

- ▶ Hood covers designed for 20", 20.4", 23.4", and 26" drums (508, 518, 594 & 660mm)
- ► Constructed of tough polyethylene for long shop life
- Dual windows provide easy access and viewing
- ► Flange with tabs securely anchors hood to package
- ▶ Orbital Arm or Direct Pull Kit guarantee smooth wire feeding
- ► Lifetime guarantee against breakage



FLANGED HOODS FIT BOTH CHIMED DRUMS & ENVIRONMENTAL PACKS
(EXCEPT FOR LARGE 26" DRUMS)

WWIC-11

REUSABLE DRUM CORE

for all coreless drums. Helps prevent wire flip.

DIRECT PULL KIT Model WWDP

- Quick disconnect with polished ceramic inlet prevents wire shaving
- Fits all cone and wire sizes
- ► Lifetime guarantee not to wear out







- WWDP

WWDP SIDE

CERAMIC INLET



ROUND DRUM HOOD



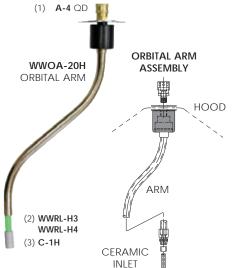
OCTAGON DRUM HOOD



LOW PROFILE OCTAGON HOOD



SQUARE DRUM HOOD



ASSEMBLY

ORBITAL ARM KITS For tangle-free wire dispensing

- ► Helps prevent wire from tangling inside the drum
- ► Arms available for all wire sizes and types up to 1/16" (1.6mm)
- Polished ceramic inlet guide will not shave wire
- ► Compatible with all Wire Wizard® Drum Hoods



WIRE PRESENCE SENSOR BLOCK & PROXIMITY SWITCH

Model WWSB-M12-K

- ► Detects & signals when wire drum is empty
- Proximity switch may be connected to PLC to stop welding cycle when wire is depleted
- Uses 12 mm proximity switch (WWA5-E34), other switches available upon request
- Compatible with all Wire Wizard® Drum Hoods

FIBER DRUM DISPENSING



ROUND DRUM HOODS 20"-23" (508-584MM) HOODS FIT BOTH CHIMED DRUMS & ENVIRONMENTAL PACKS DESCRIPTION PART NO. 20.4" (518mm) Round Hood Only WW10204F 20.4" (518mm) Round Hood w/Direct Pull Kit WW10204F-DP 23" (584mm) Round Hood Only WW10231F 23" (584mm) Round Hood w/Direct Pull Kit WW10231F-DP 26" (660mm) Round Hood Only WW10260F 26" (660mm) Round Hood w/Direct Pull Kit WW10260F-DP 26" (660mm) Round Hood, for chimed drums only WW10260C-2 26" (660mm) Round Hood w/Direct Pull Kit, for chimed drums only WW10260DP-2



OCTAGON DRUM HOODS	
20.5" (521mm) Octagon Hood (500 LB / 227 KG)	WWOC-20.5
20.5" (521mm) Octagon Hood w/Dir. Pull Kit	WWOC20.5-DP
23.5" (597mm) Octagon Hood (900 LB / 408 KG)	WWOC-23.5
23.5" (597mm) Octagon Hood w/Dir. Pull Kit	WWOC23.5-DP
23.5" (597mm) Low Profile Hood (900 LB / 408 KG)	WWOC
23.5" (597mm) Low Profile Hood w/Dir. Pull Kit	WWOC-DP



SQUARE DRUM HOODS	
21" (533mm) Square Hood (500 LB / 227 KG)	WWSC-21
21" (533mm) Square Hood w/Direct Pull Kit	WWSC21-DP
24" (610mm) Square Hood (1000 LB / 453 KG)	WWSC-24
24" (610mm) Square Hood w/Direct Pull Kit	WWSC24-DP
29" (737mm) Square Hood (990 LB / 449 KG)	WWSC-29



For 100 lb (45.4 kg) & 300 lb (136 kg) aluminum wire packages		
DESCRIPTION	PART NO.	
23.5" (597mm) Dodecagon Hood	WWDO-23.5	
Connector for EC-4 Conduit	A-12A	

DODECAGON HOODS & ACCESSORIES

ADDITIONAL EQUIPMENT	
DESCRIPTION	PART NO.
Direct Pull Kit	WWDP
Sensor Block & Prox. Switch Kit	WWSB-M12-K
Sensor Block (12mm)	WWSB-M12
Proximity Switch (PNP)	WWA5-E34
Proximity Switch (NPN)	WWA5-E35
Reusable Drum Core	WWIC-11
Conduit Connection Insulator	WWDI



COI	MPATIBLE DRUM COVERS & WIRE	PART NO.
20"	(508mm) to 23.4" (594mm) Cover for up to .062 (1.6mm) Steel or Cored Wire	WWOA-20
20"	(508mm) to 23.4" (594mm) Cover for up to .062 (1.6mm) Alum./Non-ferrous or Steel Wire	WWOA-20H
	AVAILABLE ORDITAL ARMADED A CEMENT DADTO	
	AVAILABLE ORBITAL ARM REPLACEMENT PARTS	
(1)		A-4
(1)	Quick Disconnect (QD)	A-4
(1) (2)		A-4 WWRL-H3
(' /	Quick Disconnect (QD)	

DRUM MANUFACTURER CROSS-REFERENCE CHART FOR HOODS*

WIRE MANUFAC	TURER	PAC	KAGII	IG.	DRI	JM DIA
AIR LIQUIDE®			B (227			(518mm)
7 21 20 2			B (408			(594mm)
ALCO TEC WIRE			B (141			WOC .
ARCOS ALLOYS			B (113			(518mm)
			B (227	· ·		(518mm)
AVESTA®			В (113	,		(518mm)
	5	50 LI	В (250	KG)		(518mm)
	6	00 LI	B (272	KG)	20.4"	(518mm)
	7	750 LI	B (340	KG)	26.0"	(660mm)
BÖHLER®	5	50 LI	B (250	KG)	20.4"	(518mm)
EAGLE®	5	00 LI	B (227	KG)	20.4"	(518mm)
ESAB®	5	00 LI	B (227	KG)	20.4"	(518mm)
	5	50 LI	B (250	KG)	20.4"	(518mm)
	Ģ	900 LI	B (408	KG)	23.4"	(594mm)
	Octagon 5	00 LI	B (227	KG)	20.5"	(521mm)
	Octagon 6	00 LI	B (272	KG)	20.5"	(521mm)
	Octagon 9	000 LI	B (408	KG)	23.5"	(597mm)
GEDIK® (GeKa®)	1	10 LI	B (50 k	(G)	20.4"	(518mm)
	4	185 LI	B (220	KG)	20.4"	(518mm)
	5	50 LI	B (250	KG)	23.4 "	(594mm)
GRYTGOLS BRU	K® 5	500 LI	B (227	KG)	20.4"	(518mm)
	10	000 LI	B (453	KG)	26.0"	(660mm)
HARRIS WELCO	8 5	00 LI	B (227	KG)	20.4"	(518mm)
HYUNDAI®	less than 6		`	′		(518mm)
			B (272	,		(660mm)
HOBART®			B (113	,		(594mm)
			B (181	,		(518mm)
	Tubular 5		•	,		(594mm)
	Solid 6		`	,		(518mm)
	Tubular 6		•	,		(594mm)
	Tubular 7		•	,		(594mm)
	Solid 9		•	,		(594mm)
	Dodecagon 3		•	,		(594mm)
=	Dodecagon 1					(594mm)
INE			B (200	· ·		(518mm)
			B (250	· ·		(518mm)
ICAE			B (600	,		(660mm)
ISAF			B (300			(518mm)
KAYNAK®			B (250	,		(518mm)
KOBELCO®			B (200	,		(518mm)
	5	50 L	B (250	KG)	20.4"	(518mm)

			551114 514
WIRE MANUFACTURE		CKAGING	DRUM DIA
LINCOLN ELECTRIC®		LB (227 KG)	20.4" (518mm)
		LB (272 KG)	23.4" (594mm)
		LB (408 KG)	23.4" (594mm)
		LB (453 KG)	23.4" (594mm)
	•	LB (125 KG)	24.0" (610mm)
	•	LB (227 KG)	21.0" (533mm)
		LB (408 KG)	24.0" (610mm)
	Square 1000	` ′	24.0" (610mm)
	Square 2000		29.0" (737mm)
McKAY®	ess than 600	,	20.4" (518mm)
		LB (272 KG)	23.4" (594mm)
		LB (340 KG)	23.4" (594mm)
NATIONAL STANDAR		LB (181 KG)	20.4" (518mm)
		LB (227 KG)	20.4" (518mm)
		LB (408 KG)	23.4" (594mm)
	500	LB (227 KG)	20.4" (518mm)
	900	LB (408 KG)	23.4" (594mm)
NOVAFIL®	550	LB (250 KG)	20.4" (518mm)
PARAMOUNT®	500	LB (227 KG)	20.4" (518mm)
	1000	LB (453 KG)	26.0" (660mm)
PITTARC® (PITTINI)	250	KG (550 LB)	20.4" (518mm)
	350-450	KG (772-992 LB)	23.4" (594mm)
	600-700	KG (1323-1543 LB) 26.0" (660mm)
POLYMET®		Round Drums	23.4" (594mm)
Praxair® (Prostar®) Square 275	LB (125 KG)	21.0" (533mm)
	Square 550	LB (250 KG)	21.0" (533mm)
SANDVIK®	600	LB (272 KG)	20.4" (518mm)
SELECT-ARC®	250	LB (113 KG)	20.4" (518mm)
for 5/64" / 2mm or la	arger 400	LB (181 KG)	20.4" (518mm)
diameter wire use 23		LB (227 KG)	20.4" (518mm)
(594mm) drum hood	ls 600	LB (272 KG)	23.4" (594mm)
THERMAL ARC®	500	LB (227 KG)	20.4" (518mm)
	830	LB (376 KG)	23.4" (594mm)
TRI-MARK®	400	LB (181 KG)	20.4" (518mm)
	500	LB (227 KG)	20.4" (518mm)
	600	LB (272 KG)	23.4" (594mm)
WASHINGTON ALLO	/S® 500	LB (227 KG)	20.4" (518mm)
WELDMARK*	500	LB (227 KG)	20.4" (518mm)
	1000	LB (453 KG)	26.0" (660mm)
WISCONSIN WIRE WO	ORKS® 250	LB (113 KG)	20.4" (518mm)
	500	LB (227 KG)	20.4" (518mm)

^{*} Drum sizes have been supplied by the manufacturer or their distributors who, at their discretion, reserve the right to change product standards without notice. To the best of ELCo's knowledge, information presented is accurate and current.

All packaging is round unless otherwise noted.

DRUM DOLLIES (1200 LB/544KG capacity) See all dollies & carts on pages 46-48









Heavy Duty Dolly for 26" (660mm) Round Drums



WWSD Skid Dolly (27.5"/698.5mm square)

FIRE RESISTANT FIBER DRUM AND BOX COVERS

FOR 20.4" to 24" ROUND, SQUARE OR OCTAGON BULK PACKAGES

Wire Wizard® durable fire resistant covers provide effective protection for fiber or cardboard packaging located near the weld cell. Available for round, square or octagon bulk wire packages.

- Constructed of tough fire resistant material
- ► Simple slip-on/slip-off design
- ➤ OSHA & NFPA (USA) codes require fire protection for any combustible wire packaging within 35 ft (10.7m) of the arc
- Covers meet NFPA Code 51b, "Standard for Fire Prevention During Welding, Cutting and Other Hot Work"



From OSHA.GOV website:

Standard Number: 1910.252(a)(2)(vii)

Relocation of combustibles. Where practicable, all combustibles shall be relocated at least 35 feet (10.7 m) from the work site. Where relocation is impracticable, **combustibles shall be protected with flameproofed covers** or otherwise shielded with metal or asbestos guards or curtains.

For details on NFPA Standards, see NFPA Code 51b documentation, available through www.nfpa.org

FIRE RESISTANT DRUM COVERS	
DESCRIPTION	PART NO.
Fire Resistant Drum Cover - Round 20.4" (518.2mm)	WWDC-20.4-R
Fire Resistant Drum Cover - Round 23.4" (594.4mm)	WWDC-23.4-R
Fire Resistant Drum Cover - Round 26" (660mm)	WWDC-26-R
Fire Resistant Drum Cover - Square 21" (533.4mm)	WWDC-21-S
Fire Resistant Drum Cover - Square 24" (609.6mm)	WWDC-24-S
Fire Resistant Drum Cover - Octagon 20.5" (520.1mm)	WWDC-20.5-OC
Fire Resistant Drum Cover - Octagon 23.5" (597mm)	WWDC-23.5-OC

WIRE LEVEL GAUGE FOR DRUMS AND BOXES

Model DLG

The Wire Level Gauge makes it easy to detect the amount of wire left in wire drums or boxes. The gauge features magnetic wire detection that slides down the drum as wire is depleted, offering a convenient way to monitor wire usage.

- Detects level of wire remaining in the drum with colors & percentages
- ➤ Compatible with 500–1,000 LB (227–453 KG) drums/boxes (reversible design)
- Compatible with solid steel wires in fiber drum or cardboard packaging, not compatible with cored or non-ferrous wires



NON-STOP™ WIRE DISPENSING SYSTEM



NON-STOP WIRE DISPENSING SYSTEM™

A unique process joins the end wire from a used drum with the start wire of a new full drum. Both butt-welding* and flash removal operations take only seconds and the two wire ends may be joined during the welding cycle.

Eliminates downtime for wire changeover

No operator action needed - robots can continue to weld while the next full drum is being installed

▶ Designed for use with optional Wire Pilot® Feed Assist & Wire Guide Modules

▶ Works with one or two-station robotic cells (2 or 4 drums)

► Accepts any fiber drum or cardboard wire packaging design

► Easy-to-use resistance Butt Welder (welds up to .078 / 2mm wire)

► Appropriate drum-handling carts available

Non-Stop System Dimensions

2 Drum Unit: 47" W x 29" D x 7' H (1.2m W x 0.74m D x 2.13m H)

4 Drum Unit: 47" W x 55" D x 7' H (1.2m W x 1.4m D x 2.13m H)

*Wire manufacturer must present wire end at top of dispensing drum to buttweld beginning and ending of wires. Call customer service for information.

NON-STOP WIRE DISPENSING SYSTEMS & ACCE	ESSORIES
DESCRIPTION	PART NO.
System with 2 stations for 20.4" (518mm) Ø Drums (1-Torch)	NSW-20.4-2
System with 4 stations for 20.4" (518mm) Ø Drums (2-Torch)	NSW-20.4-4
System with 4 stations for 23.4" (594mm) Ø Drums (1-Torch)	NSW-23.4-2
System with 4 stations for 23.4" (594mm) Ø Drums (2-Torch)	NSW-23.4-4
System w/2 stations: 1000LB (453 KG) Accu-Pak Drums (1-Torch	n) NSW-SC24-2
System w/4 stations: 1000LB (453 KG) Accu-Pak Drums (2-Torch	n) NSW-SC24-4
System w/2 stations: 23.5" (597mm) Octagon Drums (1-Torch)	NSW-OC23.5-2
System w/4 stations: 23.5" (597mm) Octagon Drums (2-Torch)	NSW-OC23.5-4
Wall Mounted System w/2 stations: Compatible with most drur	ms NSW-WM
Wire Guide Module Swivel Kit Adapter (allows 360° rotation)	WGM-NSW-SW-14
Butt Welder Docking Station (110V)	NSW-BW-DS-R13
Butt Welder Docking Station (220V US) N	SW-BW-DS-220-R13
Butt Welder Docking Station (220V European) NSW	V-BW-DS-220EU-R13
Portable Resistance Butt Welder (110V)	NSW-BW-R13
Portable Resistance Butt Welder (220V US)	NSW-BW-220-R13
Portable Resistance Butt Welder (220V European)	NSW-BW-220EU-R13
Wire Sizer for .035" (0.9mm) wire*	NSW-BW-WS-035
Wire Sizer for .045" (1.2mm) wire*	NSW-BW-WS-045
Wire Sizer for .052" (1.3mm) wire*	NSW-BW-WS-052
Wire Sizer for .062" (1.6mm) wire*	NSW-BW-WS-062
Wire Sizer for .078" (2mm) wire*	NSW-BW-WS-078
Wire Sizer without dies* (must specify wire wize when ordering,) NSW-BW-WS-1
Wire Parters (included on butt welder docking station)	BW-WP
Wire Gage Block (included on butt welder docking station)	WGB

^{*} Wire Sizer replacement dies available. Contact customer service for more information.



Shown with optional **Butt Welder Docking Station.** Docking Station includes Butt Welder, Wire Parters and Wire Gage Block.



WGBWIRE GAGE BLOCK
for .035, .045, .052 & .062 wire

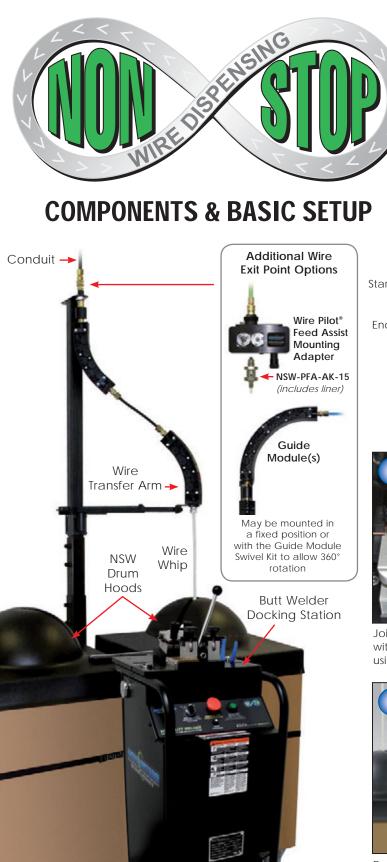


BW-WP WIRE PARTERS Leaves flat wire ends for easy buttwelding

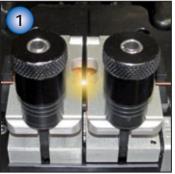


NSW-BW-R13 or NSW-BW-220-R13
PORTABLE RESISTANCE BUTT WELDER
Welds up to .078 (2mm) ferrous metal wire

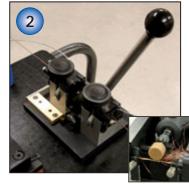
Eliminates Downtime for Wire Changeover!







Join the end wire from drum 1 with the start wire from drum 2 using the Butt Welder.



Remove the flash in the wire joint using the Wire Sizer (or rotary tool with stone bit).



Position the wire on the pathway between the two drums.



When wire from drum 1 runs out, the transfer arm will switch over to drum 2. Simply replace empty drum and repeat steps 1-3.

MECHANICAL TURN TABLE Model WWTT-2012

- ▶ 1000 lb (453kg) capacity accepts 20" to 26" (508-660mm) drums
- ▶ Designed to dispense all sizes and varieties of wire
- New and improved design includes built-in fork slots and optional wheels for easy mobility
- ▶ 4-axis adjustable arm with ceramic inlet guide prevents wire shaving
- Quick disconnect allows for easy conduit connections
- ► Excellent for submerged arc applications
- ▶ Optional cover will not compromise accessibility

Specifications

Height: 42" (1.067m) Width: 30" (762mm)
Length: 26" (660.4mm) Weight: 142 lbs (64.5kg)





WWTT-WHEEL-12 Optional wheels





WWTT-COVER-13
Optional Cover
(open & closed)



WWTT-2012

MECHANICAL TURN TABLE



WWTT-BRAKE-1-12
PNEUMATIC BRAKE KIT

BRAKE KITS FOR MECHANICAL TURN TABLE

Model WWTT-BRAKE-1-12 (OR WWTT-DB-12 FOR DRAG BRAKE KIT)

Slows and stops drum for welding applications where a higher wire feed speed is required and prevents over-rotating

WIRE PILOT® TURN TABLE ADAPTER KITS

Models PFA-WWTT-B, PFA-WWTT-B1 & PFA-WWTT-B2

- ► Firmly mounts the Wire Pilot® Feed Assist(s) (see page 32) and filter/regulator/lubricator to the top of the turn table
- ▶ Allows for longer conduit runs from the drum to the wire feeder

ITEM	PART NO.
Mechanical Turn Table for wire under 3/32" (2.4mm)	WWTT-2012
Mechanical Turn Table for large wire over 3/32" (2.4mm)	WWTT-LW-12
Mechanical Turn Table (wwtt-2012) w/assembled pneumatic b	orake WWTT-BRK-12
Turn Table Optional Wheels (set of 4)	WWTT-WHEEL-12
Pneumatic Brake Kit for Mechanical Turn Table	WWTT-BRAKE-1-12
Drag Brake Kit for Mechanical Turn Table	WWTT-DB-13
Wire Wizard Guide Module® Turn Table Adapter Bracket	WGM-4-BRKT
Turn Table Replacement Liner, includes ceramic inlet	WWTT-RL
Turn Table Replacement Wire Retainer	WWTT-23.4-DH-19
Turn Table Protective Cover for up to 26" (660mm) drums	WWTT-COVER-13
Feed Assist Adapter Kit without Wire Pilot® Feed Assist	PFA-WWTT-B
Feed Assist Adapter Kit with 1 Wire Pilot® Feed Assist	PFA-WWTT-B1
Feed Assist Adapter Kit with 2 Wire Pilot® Feed Assists	PFA-WWTT-B2



PFA-WWTT-B2 WIRE PILOT® TURN TABLE ADAPTER KIT WITH DUAL FEED ASSISTS AND LARGE WIRE WIZARD® GUIDE MODULES Ideal setup for many large diameter wire SAW applications

Dereeling Arm

TRADITIONAL DEREELING ARMS FOR WOOD & PLASTIC REELS

➤ Universal base plate designs fit all wood or plastic reels with 1-5/16" (33mm) or 5" (127mm) center arbors

▶ Twin locking cams secure base plate to reel for stability

Spring-loaded drag brake provides smooth acceleration and deceleration of feed arm and prevents wire from shingling off reel

Outer tube radius and lead will not change wire cast

Ceramic inlet guide provides long wear and prevents wire shaving

► Large coupler bearing resists both thrust and "G" loads

► Easy installation, typically requires little adjustment

Kits (RW#) include arm, liner, brake, base plate & quick disconnect



C-44 BASE PLATE FOR 5" (127mm)
ARBOR HOLES (use C-45 for National Standard® reels with 3/4" wood)



C-37 BASE PLATE FOR 1-5/16" (33mm) ARBOR



DEREELING ARMS AND COMPONENTS				
ITEM/WIRE SIZE	REEL DIAMETER	ARBOR HOLE SIZE	LINER TYPE	PART NO.
Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire	30" (762mm)	5" (127mm)	Steel	RW1034-C44
Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire	30" (762mm)	5" (127mm)	Polymer	RW1034P-C44
Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire	30" (762mm)	1-5/16" (33mm)	Steel	RW1034-C37
Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire	30" (762mm)	1-5/16" (33mm)	Polymer	RW1034P-C37
Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire	24" (610mm)	5" (127mm)	Steel	RW1035-C44
Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire	24" (610mm)	5" (127mm)	Polymer	RW1035P-C44
Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire	24" (610mm)	1-5/16" (33mm)	Steel	RW1035-C37
Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire	24" (610mm)	1-5/16" (33mm)	Polymer	RW1035P-C37
Dereeling Arm Kit for 1/16" - 5/32" (1.6-4mm) wire	30" (762mm)	5" (127mm)	Steel (lg.)	RW1028-C44
Dereeling Arm Kit for 1/16" - 5/32" (1.6-4mm) wire	30" (762mm)	1-5/16" (33mm)	Steel (lg.)	RW1028-C37
Arm for Nat. Standard® 3/4" wood reels, .035-1/16" wire	24" (610mm)	5" (127mm)	Steel	RW1035-C45
Arm for Nat. Standard® 3/4" wood reels, .035-1/16" wire	24" (610mm)	5" (127mm)	Polymer	RW1035P-C45
Adjustable Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire*	Adjustable	5" (127mm)	Polymer	RW1042-C40
Adjustable Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire*	Adjustable	5" (127mm)	Steel	RW1043-C40
Adjustable Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire*	Adjustable	1-5/16" (33mm)	Polymer	RW1042-C41
Adjustable Dereeling Arm Kit for .035 - 1/16" (0.9-1.6mm) wire*	Adjustable	1-5/16" (33mm)	Steel	RW1043-C41
Base Plate for 5" (127mm) Arbor Holes	_	5" (127mm)	_	C-44
Base Plate for 1-5/16" (33mm) Arbor Holes	_	1-5/16" (33mm)	_	C-37
Base Plate for National Standard® Reels w/ 3/4" wood	_	5" (127mm)	_	C-45
Replacement Arm for 30" (762mm) Reels (steel liner)	30" (762mm)	_	Steel	C-34
Replacement Arm for 30" (762mm) Reels (polymer liner)	30" (762mm)	_	Polymer	C-34P
Replacement Arm for 24" (610mm) Reels (steel liner)	24" (610mm)	_	Steel	C-35
Replacement Arm for 24" (610mm) Reels (polymer liner)	24" (610mm)	_	Polymer	C-35P
Large Replacement Arm for 30" (762mm) Reels	30" (762mm)	_	_	C-28
Replacement drag brake				C-12-12

Replacement Liners: C-34-LINER (steel) & C-34P-LINER (polymer) for all RW1034 arms; C-35-LINER (steel) & C-35P-LINER (polymer) for all RW1035 arms; C-28-LINER (steel) for the RW1028 arm.

*Adjustable Dereeling Arm Kits include magnetic brake shown on page 12.

For National Standard® wood reels: Be sure to check the thickness of the wood top prior to ordering, those that have a 3/4" thick top require the specific National Standard® part numbers listed above.

WIRE WIZARD® HIGH PERFORMANCE GUIDE MODULE DEREELING ARMS

The new Wire Wizard® Guide Module Dereeling Arm design utilizes patent pending Wire Guide Modules and a new magnetic brake design for low friction, flawless delivery of wire from wood reels. The Guide Module Arm is designed to eliminate skid friction on the wire, which provides a smoother wire feed than traditional dereeling arms. The innovative new magnetic brake design outlasts drag brakes and allows precise adjustment to prevent wire shingling.



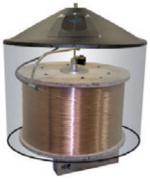
- New arm design utilizing Wire Wizard® Guide Modules eliminates skid friction, providing a smoother wire feed than traditional dereeling arms
- ➤ Base plate designs to fit 30" wood reels with 1-5/16" (33mm) or 5" (127mm) center arbors
- New adjustable magnetic brake provides smooth acceleration and deceleration of feed arm and prevents wire from shingling off reel
- Magnetic brake design will not wear out like traditional friction-based drag brakes do over time
- Ceramic inlet guide provides long wear and prevents wire shaving
- Kits (RW#) include arm, liner, brake, base plate & quick disconnect

ARMS AND CO	MPONENTS	
REEL DIAMETER	ARBOR HOLE SIZE	PART NO.
30" (762mm)	5" (127mm)	RW1039-C40
30" (762mm)	1-5/16" (33mm)	RW1039-C41
_	5" (127mm)	C-40
_	1-5/16" (33mm)	C-41
_	_	WGM-C-1
	_	WGM-C-1A
	30" (762mm) 30" (762mm)	30" (762mm) 5" (127mm) 30" (762mm) 1-5/16" (33mm) — 5" (127mm)

WOOD REEL COVERS

Models RWC1111-30 & RWC1111-30S

- ▶ Designed specifically for 30" (762mm) spools
- ▶ Prevents access to dispensing unit during operation
- Available in both unbreakable polyethylene (RWC1111-30) or economical, soft sided (RWC1111-30S) models
- Clear side and top panels provide easy access
- Polyethylene model comes fully assembled (commercially shipped)
- ► Soft cover is shippable via UPS



RWC1111-30S SOFT COVER helps protect welding wire from dust and other contaminants



RWC1111-30 REEL ASSEMBLY shown on a **WRSC** Staging Cart

SINGLE AND TANDEM VERTICAL DEREELERS FOR WOOD REELS

Models WWA-12-1 (single) & WWA-12-2 (tandem)

Wire Wizard® Single and Tandem Vertical Dereelers are built to deliver large diameter wire from 1/16" (1.6mm) to 3/16" (4.8mm) on up to 30" (762mm) wood reels. Wire may be dispensed from either the top or the bottom of the dereeler. The tandem model (shown at right) offers dispensing of two wood reels with a small footprint, saving valuable floor space.

- ➤ Wire Wizard® Guide Modules (included) eliminate points of high friction when dispensing wire from the base
- Adjustable brake allows fine tuning to prevent wire flip
- ➤ Optional Wire Pilot® Feed Assist(s) recommended for reduced pull on the feed motor & long distance runs
- Polished ceramic inlet guides prevent wire shaving

MODEL WWA-12-2 Tandem Vertical Dereeler shown with optional Feed Assists and Large Guide Modules at top



ITEM	PART NO.
Single Vertical Dereeler for Wood Reels	WWA-12-1
Tandem Vertical Dereeler for Wood Reels	WWA-12-2

SAW WIRE DELIVERY SYSTEMS FOR DRUMS

Wire Wizard® SAW Wire Delivery Systems for Drums are the ideal way to handle large diameter wire from 1/16" (1.6mm) to 3/16" (4.8mm) in bulk drum packaging. These setups allow for accurate welding with large wire by eliminating wire flip as well as preventing flux-core splitting, excessive tip wear, pulsating, burn backs and blown holes.

- ► All systems designed to eliminate wire flip & excess friction
- Compatible with up to 1,000 LB (453 KG) bulk drums and up to 3/16" (4.8mm) wire
- ▶ Does not change the cast of the wire
- Prevent tip wear, pulsating, burn back & blown holes
- ▶ Dispense large diameter wire at speeds up to 250 IPM
- Wire Pilot® Feed Assist(s) reduce pull on the feed motor and allow long distance wire feeding
- ▶ Large Wire Guide Modules (see page 14) may be installed at the wire source or near the feeder to eliminate excess friction
- ► A variety of SAW wire delivery system setup options are available, contact customer service for details









Installation

THE NEW PATH OF LEAST RESISTANCE!



The innovative **Wire Wizard Guide Module® System** utilizes a series of rollers with bearings to allow the weld wire to "coast" around bends and corners in the conduit, eliminating the points of high friction that occur in these areas. By eliminating the friction on the wire, it eliminates arc failures, improves consistency and enables considerably longer conduit runs of 100 feet or more, allowing wire packages to be centrally located. Each 45° Guide Module may be connected to additional modules to form turns of 90°, 135° or 180° within the wire dispensing system. Compatible with ferrous and non-ferrous wires. PATENT PENDING

- ► Eliminates skid friction on the wire in areas where bends/corners are necessary throughout the wire dispensing system
- Smooth, low friction wire feeding improves consistency of welds, eliminates arc failures and reduces downtime
- ▶ In product testing, the Guide Module turned POUNDS of pull force at the feeder into OUNCES!
- ► Allows long distance conduit runs of 100 ft+ (30.5m+)
- ▶ Increases life of the conduit & consumables by reducing friction
- Saves floor space by allowing wire packages to be located closer to the cell wall
- Considerably less expensive than alternative methods of eliminating friction on wire over long distances
- ▶ 45° modules may be connected together to form a 90° turn, 135° turn, 180° turn
- Tool & Diagnostic Kit available, inc. assembly & testing tools
- ► Four Models Available to Cover Virtually all Welding Applications:

 Standard Guide Module: For solid wires .035 to 5/64" (0.9 2mm)

 90° Mini Guide Module: For solid wires up to .052 (1.3mm), compact size for tight 90° turns

 Heavy Duty Guide Module HD*: For cored & stainless steel wires .035 to 5/64" (0.9 2mm)

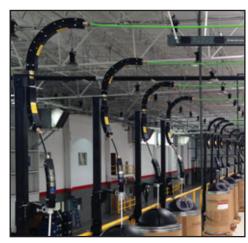
 Large Guide Module XL*: Compatible with large wire 3/32" to 5/32" (2.4 4mm)

 XL MODULES ARE IDEAL FOR SAW WELDING APPLICATIONS!
- 3 YEAR GUARANTEE! (excludes damage caused by industrial contaminants)

INTERNAL VIEW As seen mounted on the weld cell wall Cell wall mounting kit durable polymer body Heavy duty rollers with bearings Wire from source

See pages 15-18 for Guide Module Components & Accessories





Installation with 90° Guide Modules and Non-Stop™ Wire Systems

^{*}The Guide Module HD and XL models contain heavy duty steel rollers

WIRE WIZARD GUIDE MODULE® SYSTEM

WGM-1

WIRE GUIDE CAPS (required for cored wire applications)

Required for initial feeding of cored wires.

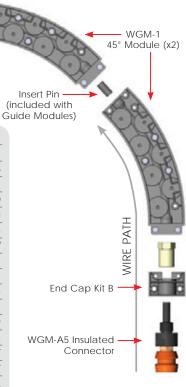
Wire Guide Caps (10 pk)

GC-1 Guide cap for up to .052 wire

GC-2 Guide cap for .062-3/32" wire

GC-CRIMPER Crimper for Wire Guide Caps





Wire Wizard Guide Module®, Single 45° (for wire up to 5/64" / 2mm) Wire Wizard Guide Module® HD, Single 45° (for stainless/cored wire up to 5/64" / 2mm)

STANDARD WIRE GUIDE MODULE PARTS & ACCESSORIES

Wife Wizard Guide Modules, Single 45 (10) Wife up to 3704 7 211111)	VV GIVI- I
Wire Wizard Guide Module® HD, Single 45° (for stainless/cored wire up to 5/64" / 2mm)	WGM-1-S
Wire Wizard Guide Module® Mini 90°, Single 90° (for wire up to .052 / 1.3mm)	WGM-M-1
Guide Module End Cap Kit 1/2" NPS-F (for A-10HM or WGM-A5)	WGM-ECK-50
Guide Module Conduit Connector for EC-4-R Conduit	A-10HM
Guide Module Insulated Connector with Quick Disconnect	WGM-A5
Guide Module Direct Pull Inlet (includes ceramic inlet guide)	WGM-DP-LW
Guide Module Support Bracket	WGM-021
Guide Module Support Bracket with Slotted Holes	WGM-024
Guide Module 45° Angle Support Bracket	WGM-025
Guide Module Weld-on or Bolt-on Support Bracket	WGM-044
Guide Module Quick Disconnect Adapter (male end)	WGM-049
Guide Module Bracket for Stacking/Mounting up to 3 Guide Modules	WGM-SMB-3
Guide Module 90° Hanging Bracket Kit	WGM-1-90-BRKT
Guide Module 45° Hanging Bracket Kit	WGM-1-BRKT
Guide Module Face Mount Bracket w/nut for A-10HM	WGM-A-10BK
Guide Module Insulated Face Mount Bracket w/nut & insulators for A-10HM	WGM-2-BRKT
Guide Module Side Mounting Bracket for Attachment to the WGM-PFA-STAND	WGM-3-BRKT
Guide Module Drum Mounting Kit for use w/Wire Wizard® Hoods	WGM-DK
Guide Module 2-13" (51-330mm) Adjustable Extension Arm with Adjustable Length & Height	t WGM-CM-1
Guide Module 10" (254mm) Adjustable Extension Arm w/Hinge Point	WGM-EA-10
Guide Module 20" (508mm) Adjustable Extension Arm w/Hinge Point	WGM-EA-20
Guide Module Swivel Kit for Direct Connection to Lincoln Electric® Series 10 Feeder	WGM-FSK-L
Guide Module Swivel Kit for Direct Connection to Panasonic®/OTC® Feeders (9/16-18 F three	ead) WGM-FSK-P
Guide Module Drum Hood Swivel Kit for use w/Wire Wizard® Hoods	WGM-HSK-15
Guide Module Swivel Kit for Connecting Stationary to Swiveling Guide Modules	WGM-MSK-14
Guide Module Floor Mounting Bracket	WGM-FLM
Guide Module Feeder Inlet Mounting Kit	WGM-IK
Guide Module L-bracket Mounting Kit	WGM-LBM-BRKT
Guide Module Union Adapter	WGM-UA
Guide Module Union Adapter Kit (washer & bracket mounts)	WGM-UAK
Guide Module Wall Mount Kit, Single Sided	WGM-WK-1-1
Guide Module Adjustable Wall Mount Kit for up to 3" (76mm) thick walls, Single Sided	WGM-WK-1-3
Guide Module Wall Mount Kit, Double Sided	WGM-WK-2-1
Guide Module Roof Mount or Wall Mount Swivel Kit - Includes 90° Compact Module	WGM-RSK-16
Adjustable Drum/Reel Stand for Guide Modules, 50"-90" H (1270-2286mm)	WGM-PFA-STAND
Guide Module Swivel Kit for WGM-PFA-STAND	WGM-STAND-SW-14
Wire Guide Caps for up to .052 wire (required for cored wire) - 10/pk.	GC-1
Wire Guide Caps for up to .062-3/32 wire (required for cored wire) - 10/pk.	GC-2
Crimping tool for installation of wire guide caps	GC-CRIMPER
Guide Module Tool & Diagnostic Kit - includes required tools for assembly & testing	WGM-ATK
LARGE WIRE GUIDE MODULE XL PARTS & ACCESSORIES	

LARGE WIRE GUIDE MODULE XL PARTS & ACCESSORIES

Large Wire Wizard Guide Module® XL, Single 45° (for wire 3/32" to 5/32" / 2.4-4mm)	WGM-LW-1
Large Guide Module End Cap Kit, 3/8" NPS-F (for A-4HD disconnect)	WGM-LW-ECK-38
Large Guide Module End Cap Kit, 1/2" NPS-F (for A-9 connector)	WGM-LW-ECK-50
Large Guide Module Conduit Connector for FC-XH-LW Conduit	A-9
Large Guide Module Quick Disconnect Adapter (male end)	WGM-LW-049
Hanging Bracket for Large Wire Guide Modules (45° or 90°)	WGM-LW-BRKT
Large Guide Module Fixed Mounting Adapter for the Wire Pilot® Feed Assist	PFA-54

GUIDE MODULE TOOL & DIAGNOSTIC KIT

Model WGM-ATK



Contains all the essential tools for installation & testing of the Guide Module System.

Kit Includes:

- Required wrenches/pliers
- Countersink Tool (pg 49)
- Stone bit for rotary tools
- Wire Draw Gauge (pg 49)
- Extra nuts & bolts
- Installation videos (USB drive)



WIRE WIZARD. GIDE HODGE SYSTEM

COMPONENTS & MOUNTING ACCESSORIES



90° MINI GUIDE MODULE |---6" (152mm)-- Allows tight 90° turns for solid wires up to .052 (1.3mm) Part # WGM-M-1

Uses same end caps as WGM-1



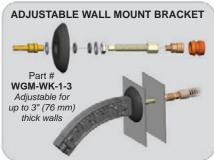








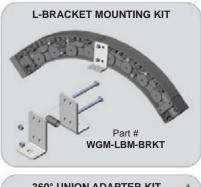






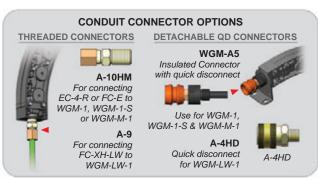








THE NEW PATH OF LEAST RESISTANCE!



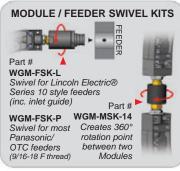








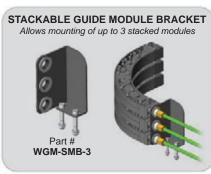






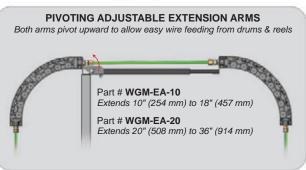








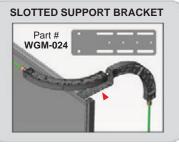










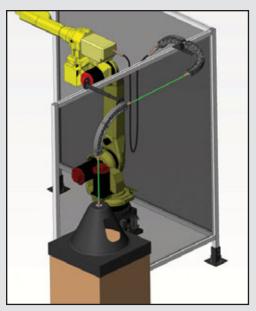




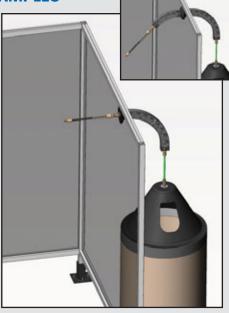
Custom mounting brackets and other accessories can be built for your specific welding application. Please contact customer service or your ELCo Regional Sales Manager for more information.

WIRE WIZARD GUIDE MODULE® SYSTEM

GUIDE MODULE APPLICATION EXAMPLES



Setup with Modules mounted on top of cell



Setup with Modules mounted on cell wall, saving valuable floor space



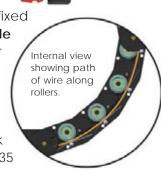
180° Modules installed on cell with two robots & the Non-Stop™ Wire Dispensing System



end Cap B

FLEXIBLE SOLUTION FOR WIRE DELIVERY ON GANTRIES, TRAVERSING AXIS & BOOMS

Featuring the same innovative concept as the fixed radius Wire Wizard® Guide Modules, the **Guide**Module® FLEX System is designed especially for welding applications using a traversing axis, gantry or boom. The FLEX utilizes a series of rollers with bearings to eliminate skid friction on the wire, providing a smooth, consistent wire feed. Ideal for many applications utilizing igus® Track Systems. For solid wires (ferrous or non-ferrous) .035 to 1/16" (0.9–1.6mm). Patent pending design.





ITEM	PART NO.
Guide Module FLEX 5 ft (1.5m) Section - includes end caps	WGM-F-2-5
Guide Module FLEX 10 ft (3m) Section - includes end caps	WGM-F-2-10
Guide Module FLEX Individual Module (for custom lengths)	WGM-F-2-M
Guide Module FLEX End Cap Kit - Includes both A & B End Caps	WGM-F-2-ECK
Guide Module FLEX Aluminum Mounting Channel, 4 ft (1.2m) section	WGM-F-2-016
Splice Kit for Connecting Mounting Channels	WGM-F-2-SK
End Cap Mounting Kit for Connecting FLEX Modules at the end of the channel	WGM-F-2-MK
Wire Caps for up to .052 wire (required for cored wire) - 10/pk. (see pg 15)	GC-1
Wire Caps for up to .062-1/16 wire (required for cored wire) - 10/pk. (see pg 15)	GC-2

GREEN POLYMER CONDUIT (see page 23 for size reference table)

Known throughout the industry for its longevity and low friction coefficient, this durable conduit has proven to outlast metal lined products while still providing much less pull on the feed motor. It's your first choice for stationary or moving feed units and is also the recommended conduit for aluminum wire applications. EC-3-R & EC-4-R conduits feature an advanced polymer formula for extended wear and durability.

- ▶ Available in four sizes: EC-3-R for light wire; EC-4-R for standard wire sizes; EC-5 & EC-6 for large wire (see wire size ref. chart on pg 23)
- ▶ Available in pre-cut lengths with attached self-threading bayonets or in bulk 50', 100', 250' or 500' rolls (15.2m, 30.5m, 76.2m or 152.4m)
- ▶ Ideal for both ferrous & non-ferrous wire, required for aluminum wire applications
- Recommended for feeding from the source to the weld cell exterior
- ▶ Self threading or compression style connectors available (see pg 22)

CONNECTOR OPTIONS & INSTALLATION TOOLS



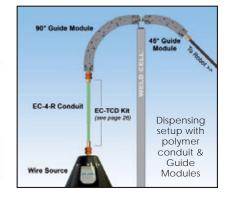








GREEN POLYMER CONDUIT Shown as cut length with connector options



DIMENSIONS	SELF THREAD COMPRESSION	FERRULE
75 ID (4.4mm) x .340 OD	A-16F-3 or A-10C-S	A-10SFE
00 ID (7.6mm) x .460 OD	A-16F-4 or A-10C-H	A-10CFE
00 ID (10.2mm) x .600 OD	A-16F-5 or A-10R	A-10RFE
50 ID (14mm) x .750 OD	A-16F-6 or A-9/A-6	A-9FE
	75 ID (4.4mm) x .340 OD 00 ID (7.6mm) x .460 OD 00 ID (10.2mm) x .600 OD	75 ID (4.4mm) x .340 OD A-16F-3 or A-10C-S 00 ID (7.6mm) x .460 OD A-16F-4 or A-10C-H 00 ID (10.2mm) x .600 OD A-16F-5 or A-10R

*EC-3-R & EC-4-R advanced polymer conduits are ideal for robotic applications

BULK CONDUIT In 50', 100', 250' or 500' rolls

P/N	P/N EXTENSION (LENGTH IN FT)
EC-3R-	50-B, 100-B, 250-B or 500-B
EC-4R-	50-B, 100-B, 250-B or 500-B
EC-5-	50-B, 100-B, 250-B or 500-B
EC-6-	50-B, 100-B, 250-B or 500-B

EC-4-R PRE-CUT CONDUIT* A-16F-4 Bayonet Attached

P/N	LENGTH
EC4-120	120" – 10 ft (3 m)
EC4-180	180" – 15 ft (4.6m)
EC4-240	240" – 20 ft (6.1m)
EC4-300	300" – 25 ft (7.6m)

EC-5 PRE-CUT CONDUIT* A-16F-5 Bayonet Attached

P/N	LENGTH
EC5-120	120" – 10 ft (3 m)
EC5-180	180" – 15 ft (4.6m)
EC5-240	240" – 20 ft (6.1m)
EC5-300	300" – 25 ft (7.6m)

EC-6 PRE-CUT CONDUIT* A-16F-6 Bayonet Attached

P/N	LENGTH
EC6-120	120" – 10 ft (3 m)
EC6-180	180" – 15 ft (4.6m)
EC6-240	240" – 20 ft (6.1m)
EC6-300	300" – 25 ft (7.6m)

^{*}Custom pre-cut lengths of conduit are available, contact customer service for ordering information

QUALITY TESTED FOR MAXIMUM DURABILITY!

We tested the flexural strength of our EC-3-R & EC-4-R advanced polymer conduit against a leading competitor by continuously flexing it back & forth until the point of failure. Wire Wizard® polymer conduit survived this rigorous test over 70 TIMES longer than the competitor. The results speak for themselves!

Flexural Strength Testing Device

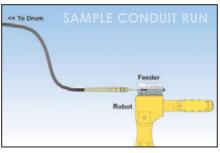




EXTRA FLEXIBLE CONDUIT Shown as cut length with connector options



FC-X CONDUIT (EXPLODED VIEW)



FC-XH Conduit going to the robot

FC-X PRE-CUT CONDUIT* with A-11X Swaged Bayonet

	3
P/N	LENGTH
FCXS-120	120" – 10 ft (3 m)
FCXS-180	180" – 15 ft (4.6m)
FCXS-240	240" – 20 ft (6.1m)
FCXS-300	300" – 25 ft (7.6m)

EXTRA FLEXIBLE CONDUIT (see page 23 for size reference table)

Our most durable conduit displays exceptional wear characteristics and very low friction coefficient. Perfect for robotics, gantry, linear, or any application where a tighter radius is required. Available in pre-cut lengths, 100 ft (30.5m) bulk coils, or by the foot. All Extra Flexible Conduit now features a spatter-resistant outer jacket, low friction smooth-feed wire coating and patented elliptical wire spring liners.

- ➤ Available in four sizes: FC-X Standard; FC-XH Heavy Duty; FC-XH-LW For Ig. diameter wire; FC-X-SW For sm. diameter wire
- ► Available in 1 to 100 ft (305mm to 30.5m) continuous length coil
- ► FC-X and FC-XH are available in cut lengths with attached bayonets on each end (swaged style)
- ► Compression or swaged style connectors available (see page 22)





Recommended for light mobility applications

STEEL STRAIN RELIEF OPTION (SEE PAGE 22)

Recommended for high mobility applications

P/N	DIMENSIONS	CONNECTOR / FERRULE		
FC-X-SW	.090 ID (2.3mm) x .353 OD (9mm)	A-10C-S	A-10SFE	
FC-X	.241 ID (6.1mm) x .500 OD (12.7mm)	A-10C-X	A-10XFE	
FC-XH	.291 ID (7.4mm) x .610 OD (15.5mm)	A-10R	A-10RFE	
FC-XH-LW .390 ID (10mm) x .750 OD (19mm)		A-9/A-6HD	A-9-FE	

Conduit Color Coding - Pre-cut lengths are color-coded as follows:

10 FT (3m) RED

15 FT (4.6m) WHITE

20 FT (6m) YELLOW

P/N

25 FT (7.6m) BLUE

LENGTH

FC-XH PRE-CUT CONDUIT* with A-11XH Swaged Bayonet

P/N	LENGTH
FCXHS-120	120" – 10 ft (3 m)
FCXHS-180	180" – 15 ft (4.6 m)
FCXHS-240	240" – 20 ft (6.1m)
FCXHS-300	300" – 25 ft (7.6m)

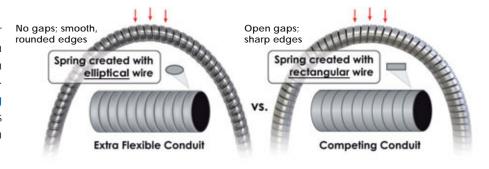
FC-X-SW-B 100 ft (30.5m)
FC-X-B 100 ft (30.5m)
FC-XH-B 100 ft (30.5m)
FC-XH-LW-B 100 ft (30.5m)

BULK CONDUIT*

sold in 100 ft (30.5m) sections

ELLIPTICAL WIRE LINERS

All ELCo spring liners featured in our Extra Flexible Conduit and Torch Liners are built with a unique smooth coated elliptical wire to help eliminate wire shaving and to reduce drag coefficient. To the right are images displaying the difference between ELCo & a typical spring liner.



Add "SI" to end of part # for polymer strain relief, "SR" for steel strain relief Delete "S" from part number for compression connections

^{*} Custom pre-cut lengths available, contact customer service for details

Ideal for

Tight Spaces in

Robotic Weld Cells

EXTREME FLEX CONDUIT Shown as cut length with

connectors and strain reliefs

EXTREME FLEX CONDUIT (see page 23 for size reference table)

Extreme Flex Conduit is designed for robotic welding applications requiring a high degree of mobility and flexibility. It features the same low friction elliptical wire spring liner as the Extra Flexible conduit, only with a single spatter-resistant outer jacket to provide more flexibility. Extreme Flex conduit is the ideal choice for robotic weld cells with a tight space between the wire source and the robot.

- ➤ Sold in pre-cut lengths with attached connectors, fittings are available for both Wire Wizard® or Panasonic® style quick disconnects as well as threaded disconnects
- ► Suitable for steel wire sizes up to .052 (1.3mm)
- ➤ Polymer strain reliefs included on all pre-cut lengths for enhanced strength at connection points

FC-E CONDUIT (EXPLODED VIEW)



FC-E Conduit Reinforcement Tube Cou

Coupler Fitting

Flexible outer jacket Patented low friction elliptical wire liner

DOLVMED CEDAIN DELIFE

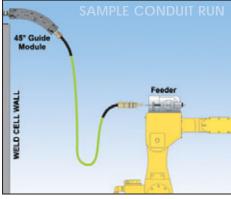
POLYMER STRAIN RELIEF Included on all pre-cut lengths

P/N	DIMENSIONS	CONNECTORS
FC-E	.241 ID (6.1mm) x .440 OD (11.2mm)	See Below

FC-E CONDUIT CONNECTOR OPTIONS FOR PRE-CUT LENGTHS

Connectors are included on all pre-cut lengths

P/N	DESCRIPTION
A-16M-P1	Male connector for Wire Wizard® quick disconnect
A-16M-P2	Male connector for Panasonic® style quick disconnect
A-11E-2	Swaged threaded connector for A-16M-P1 or A-16M-P2
A-11E-2-3	Reinforcement tube for coupler fitting
A-11E-1A	Coupler fitting for threaded disconnects
A-11E-1B	Nut for attachment to threaded disconnects (inc. w/A-11E-1A)



FC-E Conduit in weld cell with short distance between robot and wall

FC-E PRE-CUT CONDUIT*

with Swaged Fittings &
Polymer Strain Reliefs (both ends)
for Wire Wizard® Disconnects

P/N	LENGTH
FCE-3.0-WW	118" – 9.8 ft (3m)
FCE-5.0-WW	197" – 16.4 ft (5m)
FCE-7.5-WW	295" – 24.6 ft (7.5m)
FCE-10.0-WW	394" – 32.8 ft (10m)

FC-E PRE-CUT CONDUIT*

with Swaged Fittings & Polymer Strain Reliefs (both ends) for Panasonic® Disconnects

P/N	LENGTH
FCE-3.0-P	118" – 9.8 ft (3m)
FCE-5.0-P	197" – 16.4 ft (5m)
FCE-7.5-P	295" – 24.6 ft (7.5m)
FCE-10.0-P	394" – 32.8 ft (10m)

FC-E PRE-CUT CONDUIT*

with Screw-on Fittings & Polymer Strain Reliefs (both ends) for Threaded Disconnects

P/N	LENGTH
FCE-3.0-A	118" – 9.8 ft (3m)
FCE-5.0-A	197" – 16.4 ft (5m)
FCE-7.5-A	295" - 24.6 ft (7.5m)
FCE-10.0-A	394" – 32.8 ft (10m)



A-16M-P1 Vire Wizard® stvle

Wire Wizard® style fitting included with **-WW** precut FC-E conduit



A-16M-P2 Panasonic® style fitting

included with **-P** pre-cut FC-E conduit



A-11E-1A & A-11E-1B Threaded disconnect

fitting included with **-A** pre-cut FC-E conduit

Replace "-WW" part # with "-WP" for A-16M-P1 fitting on one end & A-16M-P2 on the other

*Custom pre-cut lengths available, contact customer service for details.

All pre-cut lengths of FC-E conduit include polymer strain relief at both ends

CONDUIT CONNECTORS



10.5" & 21.5"

Polymer Conduit Connectors

. •			5.
EC-3-R	EC-3-R EC-4-R		EC-6
A 1/5 2	A 1/5 A	A 1/F F	A 1/5/
A-16F-3	A-16F-4	A-16F-5	A-16F-6
A-10C-S	A-10C-H	A-10R	A-6 (or A-6HD*) & A-9
	A-10HP	A-10RP	*Use A-6HD if connecting to an HD style disconnect, use A-6 for all other disconnects
	A-10C-H-SR	A-10R-SR	
See page 26 for replace- ment ferrules for compres- sion style	A-10C-H-SRL	All E-Z Feed connecto feature rounde	ors

shoulders for smooth wire

feeding

connectors.

EAtte		nadit Gomine	01013
FC-X	FC-XH	FC-XH-LW	FC-X-SW
A-10C-X	A-10R	A-6HD (or A-6*) & A-9	A-10C-S
A-10XP	A-10RP	A-11XH-LW	
A-10C-X-SR	A-10R-SR	A	4
A-11X	A-11XH		
A-10C-X-SRL			
	l	Polymer Strain Relief	Steel Spring Strain Reliefs,

Extra Flexible Conduit Connectors

Polyi	Polymer Conduit Connectors				
	EC-3-R Connectors				
Part No.	Connector				
A-16F-3	Self Threading (1/8" NPT-F) - Steel				
A-16F-3B	Self Threading (1/8" NPT-F) - Brass				
A-10C-S	Compression (Ferrule)				
	EC-4-R Connectors				
A-16F-4	Self Threading (1/4" NPT-F) - Steel				
A-16F-4B	Self Threading (1/4" NPT-F) - Brass				
A-10C-H	Compression (Ferrule)				
A-10HP*	Compression (1/4" NPT-F)				
A-12A	Aluminum Compression				
A-10C-H-SR	Strain Relief Connector - 10.5" (267mm)				
A-10C-H-SRL	Strain Relief Connector - 21.5" (546mm)				
	EC-5 Connectors				
A-16F-5	Self Threading (3/8" NPT-F)				
A-10R	Compression (Ferrule)				
A-10RP*	Compression (1/4" NPT-F)				
A-10R-SR	Strain Relief Connector				
A-10R-QD	Connector w/Disconnect				
A-10R-QD-SR	Strain Relief w/Disconnect				
	EC-6 Connectors				
A-16F-6	Self Threading (1/2" NPT-F)				
A-6 (or A-6HD) & A-9	Combination Compression				

Extra Flexible Conduit Connectors					
FC-X Connectors					
Connector					
Compression (Ferrule)					
Compression (1/4" NPT-F)					
Strain Relief Connector - 10.5" (267mm)					
Strain Relief Connector - 21.5" (546mm)					
Swaged Connector					
FC-XH Connectors					
Compression (Ferrule)					
Compression (1/4" NPT-F)					
Strain Relief Connector					
Swaged Connector					
Connector w/Disconnect					
Strain Relief w/Disconnect					
C-XH-LW Connectors					
Combination Compression					
Swaged Connector					
FC-X-SW Connectors					
A-10C-S Compression (Ferrule)					

RECOMMENDED CONDUIT SIZE REFERENCE TABLE

The table below shows the recommended conduit based on the wire type, size, length of run and application. When choosing the proper conduit, please keep in mind these seven variables of wire dispensing:

- ▶ Type of Wire: Such as steel, aluminum, cored steel, or silicone bronze
- ▶ Wire Diameter
- ► Length of Run
- ▶ Wire Cast: The curvature of one strand of welding wire, measured as the diameter of the circle formed by a strand laying on a flat surface
- ➤ Wire Helix: The distance one end of a single wire strand lying on a flat surface rises off that surface (also known as the wire "pitch")
- ▶ **Application**: Robotic or semi-automatic, number of turns
- **▶** Drawing Compounds



	DISTANCE & RECOMMENDED CONDUIT							
			T (1-3 M)		11-20 FT (3-6 M)		OVER 20 FT (6 M)	
WIRE TYPE	SIZE (INCHES/MM)	STATIONARY	ROBOTIC	STATIONARY	ROBOTIC	STATIONARY	ROBOTIC	
Steel	.025"/0.6 mm	EC-3-R	FC-X-SW/EC-3-R	EC-3-R	FC-X-SW/EC-3-R	EC-3-R	FC-X-SW/EC-3-R	
Steel	.030"/0.8 mm	EC-3-R	FC-X-SW/EC-3-R	EC-3-R	FC-X-SW/EC-3-R	EC-4-R	FC-X or E/EC-4-R	
Steel	.035"/0.9 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	
Steel	.040"/1 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	
Steel	.045"/1.1 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	
Steel	.052"/1.3 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-5	FC-XH	
Steel	1/16"/1.6 mm	EC-5	FC-XH	EC-5	FC-XH	EC-5	FC-XH	
Steel	5/64"/2 mm	EC-5	FC-XH	EC-5	FC-XH	EC-5	FC-XH	
Steel	3/32"/2.4 mm	EC-5	FC-XH	EC-5	FC-XH	EC-5	FC-XH	
Steel	7/64"/2.5 mm	EC-5	FC-XH	EC-5	FC-XH	EC-6	FC-XH-LW	
Steel	1/8"/3.2 mm	EC-6	FC-XH-LW	EC-6	FC-XH-LW	EC-6	FC-XH-LW	
Steel	5/32"/4 mm	EC-6	FC-XH-LW	EC-6	FC-XH-LW	EC-6	FC-XH-LW	
Aluminum	.025"/0.6 mm	EC-3-R*	EC-3-R	EC-3-R	EC-3-R	EC-3-R	EC-3-R	
Aluminum	.030"/0.8 mm	EC-3-R*	EC-3-R	EC-3-R	EC-3-R	EC-3-R	EC-3-R	
Aluminum	.035"/0.9 mm	EC-3-R*	EC-3-R	EC-4-R	EC-4-R	EC-4-R	EC-4-R	
Aluminum	3/64"/1.2 mm	EC-4-R	EC-4-R	EC-4-R	EC-4-R	EC-4-R	EC-4-R	
Aluminum	1/16"/1.6 mm	EC-4-R	EC-4-R	EC-4-R	EC-4-R	EC-4-R	EC-4-R	
Aluminum	3/32"/2.4 mm	EC-4-R	EC-4-R	EC-4-R	EC-4-R	EC-4-R	EC-4-R	
Cored - Steel	.035"/0.9 mm	EC-4-R/FC-X	FC-X or E/EC-4-R	EC-4-R/FC-X	FC-X or E/EC-4-R	EC-4-R/FC-X	FC-X or E/EC-4-R	
Cored - Steel	.045"/1.1 mm	EC-4-R/FC-X	FC-X or E/EC-4-R	EC-4-R/FC-X	FC-X or E/EC-4-R	EC-4-R/FC-X	FC-X or E/EC-4-R	
Cored - Steel	.052"/1.3 mm	EC-4-R/FC-X	FC-X or E/EC-4-R	EC-4-R/FC-X	FC-X or E/EC-4-R	EC-4-R/FC-X	FC-X or E/EC-4-R	
Cored - Steel	1/16"/1.6 mm	EC-5	FC-XH	EC-5	FC-XH	EC-5	FC-XH	
Cored - Steel	5/64"/2 mm	EC-5	FC-XH	EC-5	FC-XH	EC-5	FC-XH	
Cored - Steel	3/32"/2.4 mm	EC-5	FC-XH	EC-5	FC-XH	EC-5	FC-XH	
Cored - Steel	1/8"/3.2 mm	EC-6	FC-XH-LW	EC-6	FC-XH-LW	EC-6	FC-XH-LW	
Stainless	.035"/0.9 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	
Stainless	.045"/1.1 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	
Stainless	.052"/1.3 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	
Stainless	1/16"/1.6 mm	EC-5	FC-XH	EC-5	FC-XH	EC-5	FC-XH	
Silicon Bronze	.030"/0.8 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	
Silicon Bronze	.035"/0.9 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	
Silicon Bronze	.045"/1.1 mm	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	EC-4-R	FC-X or E/EC-4-R	
Silicon Bronze	1/16"/1.6 mm	EC-5	FC-XH	EC-5	FC-XH	EC-5	FC-XH	

DISTANCE & RECOMMENDED CONDUIT

*Ideal size for pushing or pulling aluminum wire

Note: FC-E Extreme Flex conduit is recommended over FC-X for robotic applications with tight spaces.



MODEL CM-F-1 BASIC CABLE MANAGEMENT KIT Basic WizardGear™ Cable Management Kit includes robot base adapter (A), 3 cable clamp assemblies (B). Additional bracket (C) available for robot peripherals.



WIZARDGEÄR

CARIF MANAGEMENT

ROBOT CABLE MANAGEMENT KITS

The new WizardGear™ line of robot cable management products provides organization, support and protection for all lines and cables attached to robots. Protect cables from damage that can cause unnecessary downtime and costly repairs. *Using* zip ties or other poor methods of attachment can even void the warranty on your control cables. Cable organizers are currently available for Fanuc® robots and more are in development for others. Custom cable management systems also available.

- Provides organization, support and protection for all lines and cables attached to robots
- Protects cables from damage that can cause unnecessary downtime and costly repairs
- Approved by Fanuc® for securing & protecting control cables - other attachment methods may void warranty on cables
- New model featuring two hose assemblies designed for welding robots with material handling peripherals, such as part grippers
- Cable & Conduit Balancers, as well as Spatter-Resistant Cable Sleeves also available
- Custom cable management systems can be developed for other robot models, contact customer service for details



CM-F-3 Back View

WI	ZARDGEAR™ ROBOT CABLE MANAGEMENT KITS
/N	ITEM
CM-F-3	Deluxe Fanuc® Robot Cable Management Kit Includes protective tubing system and 3/0 welding cable
CM-F-3-N	MH Fanuc® Robot Cable Management Kit for Robots with Torch/Part Gripper Combination Includes 2 protective tubing systems & 3/0 welding cable
CM-F-1	Basic Fanuc® Robot Cable Management Kit Includes base adapter and 3 cable clamp assemblies

Optional Bracket for Robot Peripheral Cables

P С

С

CM-F-2

RETRACTABLE CONDUIT/CABLE BALANCERS & HANGERS

- ▶ Balancer provides easy method of hanging conduit & cables
- ► Conduit Hanger prevents excess droopage
- ▶ Prevents cables from hanging in areas prone to damage
- ▶ Hangers feature velcro straps to secure cables and conduit

PART NO.	DESCRIPTION
RCH-S	Conduit Balancer - Load: 1-3½ lbs (0.5-1.6 kg)
RCH-H	Conduit Balancer - Load: 2-41/2 lbs (1-2 kg)
RCH-4-6	Conduit Balancer - Load: 4-6 lbs (1.8-2.7 kg)
RCH-5-13	Conduit Balancer - Load: 5-13 lbs (2.3-6 kg)
RCH-11-19	Conduit Balancer - Load: 11–19 lbs (5–8.6 kg)
RCH-3-7-SH	Conduit Balancer with Shock Stop - Load: 3-7 lbs (1.4-3.2 kg)
RCH-5-10-SH	Conduit Balancer with Shock Stop - Load: 5-10 lbs (2.3-4.5 kg)
RCH-8-12-SH	Conduit Balancer with Shock Stop - Load: 8-12 lbs (3.6-5.4 kg)
RCH-10-15-SH	Conduit Balancer with Shock Stop - Load: 10-15 lbs (4.5-6.8 kg)
RCH-16-23-SH	Conduit Balancer with Shock Stop - Load: 16-23 lbs (7.3-10.4 kg)
RCH-22-27-SH	Conduit Balancer with Shock Stop - Load: 22–27 lbs (10–12.2 kg)
RCH-SH	Shock Stop Kit (only compatible with -SH models)
CHH-22	22" (559mm) Conduit Hanger w/four Retaining Straps
CHH-16	16" (406mm) Conduit Hanger w/four Retaining Straps
CHH-10	10" (254mm) Conduit Hanger w/two Retaining Straps





HEAVY DUTY BALANCERS WITH SHOCK STOP (-SH) Prevents cable damage often caused by overtensioning

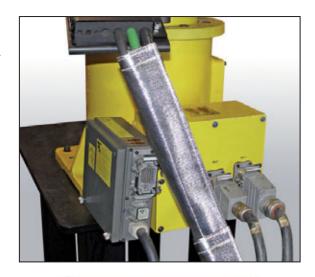
CONDUIT & CABLE SLEEVES

Constructed from Kevlar® with a spatter-resistant aluminized or silicon coating, Wire Wizard® conduit & cable sleeves provide the maximum degree of protection inside the weld cell.

- Protects and secures conduit, control cables, cooling lines, gas lines, hydraulic hoses and other lines connected to robots
- ► Two I.D. sizes available 2" (51mm) & 4" (102mm) in 1, 2, 3 & 4 ft (305, 610, 914 & 1219mm) lengths
- ▶ Use **aluminized sleeves** for high heat applications
- Velcro ends can be chain linked together
- Sleeve ends accept nylon tie straps
- ▶ Zipper + Velcro enclosure

	CONDUIT & CABLE SLEEVES*	
P/N	ITEM	LENGTH
KCS-2-12	2" Sleeve (51mm) I.D.	1 ft (305mm)
KCS-2-24	2" Sleeve (51mm) I.D.	2 ft (610mm)
KCS-2-36	2" Sleeve (51mm) I.D.	3 ft (914mm)
KCS-2-48	2" Sleeve (51mm) I.D.	4 ft (1.2m)
KCS-4-12	4" Sleeve (102mm) I.D.	1 ft (305mm)
KCS-4-24	4" Sleeve (102mm) I.D.	2 ft (610mm)
KCS-4-36	4" Sleeve (102mm) I.D.	3 ft (914mm)
KCS-4-48	4" Sleeve (102mm) I.D.	4 ft (1.2m)

*Add -A to the part number for aluminized coating, add -S for silicon coating





Aluminized Sleeve (add -A to Part #)

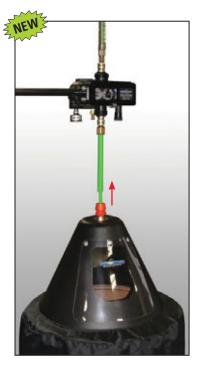


Silicon Coated Sleeve (add -S to Part #)



Open sleeve showing velcro & zipper enclosure

CONDUIT CONNECTORS & ACCESSORIES



TELESCOPING CONDUIT QUICK DISCONNECT KIT

Model EC-TCD

Changing out wire drums is quick & easy with the new Telescoping Conduit Quick Disconnect Kit. Simply disconnect from the drum hood and slide the conduit up, then slide it back down to reconnect to the next drum of wire.

- ► Kit includes two linked pieces of our EC green polymer conduit with connector ends that can extend up to 5' (1.5m)
- ▶ May be trimmed if shorter length is needed (see tools below)
- ► Compatible with ferrous & non-ferrous wires up to 3/32" (2.4mm)
- Adapts to drums or wood reels

EC-TCD TELESCOPING CONDUIT DISCONNECT KIT Shown in use with drum & the Wire Pilot® Feed Assist (trimmed to shorter length)



EC-TCD Shown with included connector ends (trimmed down from original length)

REPLACEMENT FERRULES

Choice of sizes for the right compression fit for the application







A-10RFE



A-10CFE



A-10XFE



A-10SFE

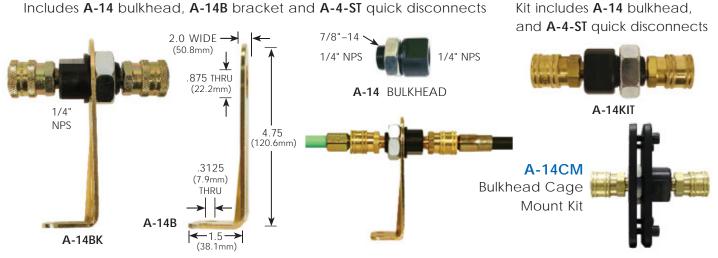
CONNECTORS
OR A-10RP
OC-H A-10HP
OC-X A-10XP
OC-S

A-14 KIT

BULKHEAD CONNECTORS

A-14BK Kit

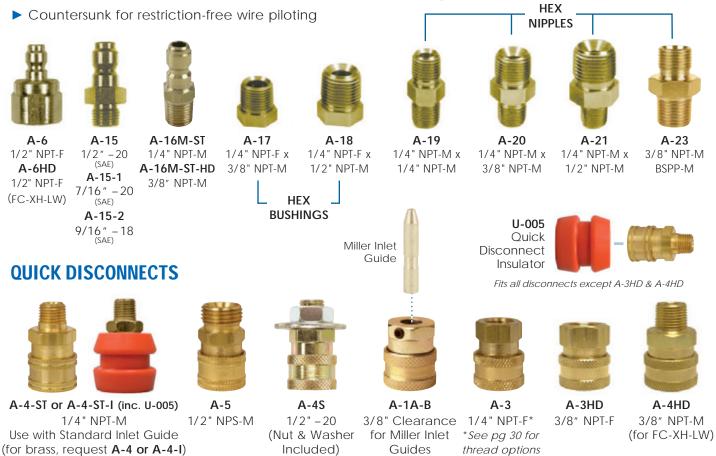
Includes A-14 bulkhead, A-14B bracket and A-4-ST quick disconnects



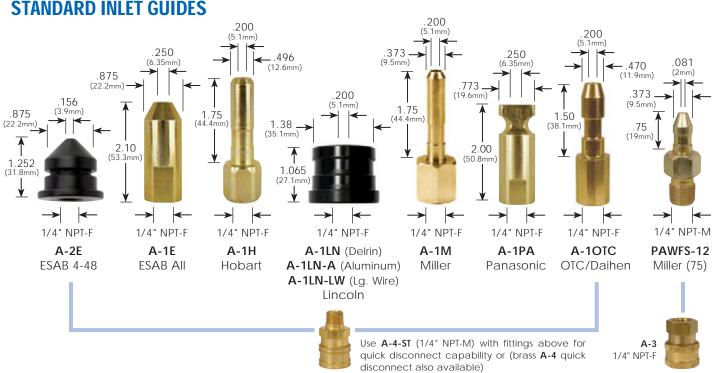
E-Z FEED" CONNECTORS

ADAPTER FITTINGS

▶ NPT male (M) and female (F) pipe threads for optimum sealing



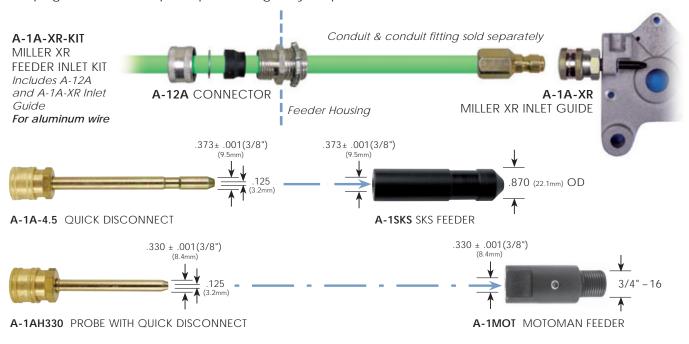
STANDARD INLET GUIDES



E-Z FEED" Connectors

ADAPTERS FOR FEEDER INLET GUIDES

Configurations shown are just for demonstration purposes only. Please refer to the **Cross-Reference Table** on page 30 for a complete parts listing for your particular wire feeder.





UNIVERSAL INLET KIT Model A-1AK

- Five piece kit includes A-1A probe & four A-7 phenolic adapter bushings for stable and durable performance
- Will support the use of a variety of wire feeders

LINCOLN SERVO INLET GUIDES

- ▶ Designed for use with Lincoln Servo Torch
- ▶ Ideal for all aluminum & steel applications
- Inlet guide connects to Polymer or Extra Flexible conduit

A-4L-H 0.09 (2.3mm) ID EC-1

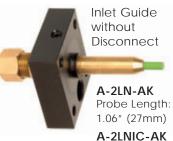


A-2LN Servo Torch Connector for EC-3 Conduit

A-2LN-AK-QD
Probe Length:
1.06" (27mm)

A-2LNIC-AK-QI

A-2LNIC-AK-QD Probe Length: 0.834" (21mm)



Probe Length: 0.834" (21mm)

LINCOLN ELECTRIC® SAW FEEDER INLET/OUTLET ■

For 10S, NA-3 NA-4 or NA-5 wire feeders



LINCOLN ELECTRIC® TWIN ARC FEEDER INLET

Model A-2NA-5

For use with Lincoln Twin Arc Feeder (disconnects sold separately)





E-Z FEED" CONNECTORS

INLET GUIDES WITH QUICK DISCONNECTS

For steel weld wire feeder and straightener applications

1.69

(43mm)

A-1E-A

3004 Series

(38.1mm)

A-1OTC-FX

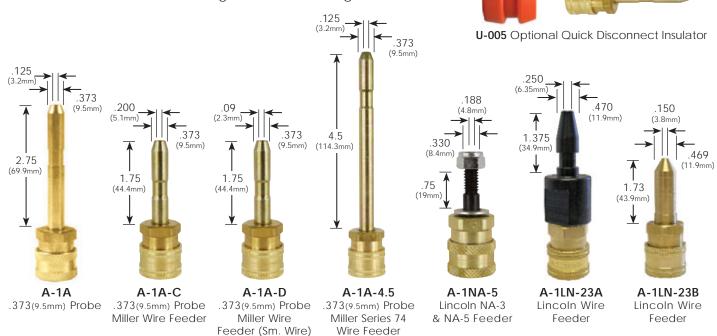
OTC

(34.5mm)

A-1CL

Cloos

- Provides trouble-free interface of connections
- Quick disconnects feature eight retainer bearings





CONNECTOR LINERS

- Designed to line steel connectors when using aluminum and other non-ferrous metal wires
- Non-metallic to prevent abrasion and contamination



FEEDER INLET CROSS-REFERENCE CHART

FEEDER MANUFACT		WIRE WIZARD® INLET GUIDE P/N
CEA S.p.A.	ALL	A-1AK
Cebora S.p.	A. ALL	A-4S
CK Systema	tics MP175 and S4165	A-4S
Cloos	Most Models	A-1CL
Cybo Robot	tics Most Models	A-4S
ESAB	ALL (except 4-48)	A-1AK-E
	4-48	A-2E & A-4-ST
	Aristo 30 Series	A-4S
	RoboFeed 3004 Series	A-1E-A
Fanuc	Servo Torch	A-3QDF-6 & A-23
Fronius	Feeder without Set Screw	A-1FRO-B
	Feeder with Set Screw	A-1FRO
	Feeder with Stripped Set Scre	ew A-2FRO
Hobart	Series 27	A-1H & A-4-ST
		A-1A, A-1A-4.5
	Models with 3/4"-16 Thread	A-1A & A-22
		A-1AH330 & A-1MOT
Kobelco	Male Threaded Inlet 1/2"-20	A-3QDF-3
Lincoln	4R100 and 4R220	A-1LN & A-4-ST
Electric	PF Series, inc. PowerFeed® 8	34 A-1LN & A-4-ST
	LN-7, LN-9, and LN-25	A-1A
	LN-8	A-1H & A-4-ST
	NA-3 and NA-5	A-1NA-5/A-1NA-5-SW-ADP
	Synergic 7	A-1B-C2
	LF-72	A-1LN & A-4-ST
	LF-74	A-1LN-EK
	Series 10 (10M, DH-10, LN-10)) A-1LN & A-4-ST
	Servo Torch	A-2LN-AK

FEEDER MANUFACTU	JRER FEEDER TYPE	WIRE WIZARD® INLET GUIDE P/N
Miller	Most Models	A-1A-C, A-1M & A-4-ST,
		or A-1A
	22A and 24A	A-1AK
	Auto Axcess	A-1A-C
*4.4		A-1A-4.5 or A-1A-C
^IVIeasui	re required probe length prior to c	· ·
	Series 75	PAWFS-12 & A-3
	RAD 400	A-1LN-S-12
	XR Series (for alum. wire)	A-1A-XR-KIT
MK Products		A-1AK
Motoman	Female Inlets	A-1AH330 & A-1MOT
	Male Threaded Inlets	A-3QDF-3
	Hyper Feeder	A-1MOT-HP
OTC/	Male Threaded Inlet 7/16"-20	A-3QDF-2
DAIHEN	Male Threaded Inlet 9/16"-18	A-3QDF-4
	FX Style	A-1OTC-FX
	D Series	A-3QDF-4
	AF4-001	A-3QDF-2
	OTC	A-1OTC & A-4-ST
Panasonic	Female Inlet: .77 OD (19.6mm)	A-1PA & A-4-ST
	Female Inlet: .57 OD (14.5mm)	A-2PA-QD
	Male Threaded Inlet	A-3QDF-4
Pow Con	Most Models	A-1AK
SKS	Most Models	A-2SKS
	Older Models	A-1SKS & A-1A-4.5
Thermal Arc	17A	A-1AH330 & A-1MOT

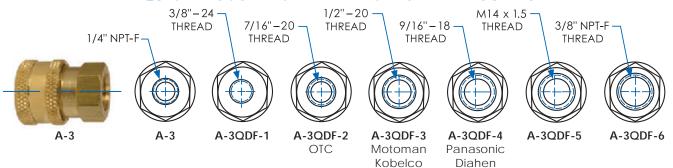
This table is intended for the use of Wire Wizard® customers and is provided from relevant information supplied by feeder manufacturers or their distributors who, at their discretion, reserve the right to alter product specifications or features without notice. Every effort has been made to ensure the information presented is accurate and current. If you should require further assistance please contact ELCo Enterprises, Inc.

LINCOLN ELECTRIC LF-74 FEEDER INLET GUIDE EXTENSION KIT Model A-1LN-EK



- Extends connection to the disconnect at the feeder
- Kit includes A-1LN inlet guide, extension adapter and quick disconnect with insulator

FEMALE THREADED QUICK DISCONNECT REFERENCE FOR INLET GUIDES



WIRE STRAIGHTENERS

Wire Wizard® manufactures four versions of wire straighteners that can be used to straighten or recast all types of wire. The main body is constructed of aluminum, making our straighteners some of the lightest in the market. All models are equipped with a locating calibration on the face of the unit and a fine adjustment scale on the tension knob. This results in an extremely fast and accurate setting of wire cast. Our full range of fittings and inlet guides guarantee a trouble-free fit for any application or system.



SMALL WIRE STRAIGHTENERS MODELS WSS-100 & WSS-100-A

For Wire Sizes .035 to .062 (Order WSS-100-A for Aluminum Wire)
Dimensions: 3.74" W x 3" H x 1.63" D (95mm W x 78mm H x 41.3mm D)
Weight: 1 lb (0.45 kg)



WSS-100 Drive Rolls U-Groove Drive Rolls for Steel Wire



WSS-100-A Drive Rolls V-Groove Drive Rolls for Aluminum Wire



SMALL WIRE STRAIGHTENER FITTINGS*

NON-THREADED FITTINGS

Connection to disconnect, on feeder or in-line



Steel Wire: A-1QD-12 or A-1QD-5/32 (for large wire)

Connection to disconnect, on feeder or in-line



Aluminum Wire: A-1QD-5/32 & A-4L-H liner

WIRE

0

Fnd View



WSS-100 Steel Wire Straightener Or WSS-100-A

WSS-100-A
Aluminum Wire Straightener

THREADED FITTINGS

A-3 Quick Disconnect



Steel Wire: A-1LN-S-12 or A-1LN-S-5/32 (for large wire)

A-3 Quick Disconnect

Aluminum Wire: A-1LN-S-5/32 & A-4L-H liner

Steel or Aluminum Wire: A-1C-S-12 Delrin with ceramic inlet

*Fittings may be used as inlets or outlets depending on setup

MEDIUM WIRE STRAIGHTENER

MODEL WSM-100

For Wire Sizes .062 to 3/32" (1.6 - 2.4mm)

Dimensions: 5.71" W x 3.34" H x 1.875" D

(145mm W x 84.7mm H x 47.63mm D)

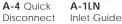
Weight: 1.75 lbs (0.8 kg)

FITTINGS FOR WSM-100

Order **A-1LN-K** for Inlet/Outlet Kit (includes two A-1LN's)

A-16M-ST







LARGE WIRE STRAIGHTENER

MODEL WSL-100

For Wire Sizes 3/32" (2.4mm) & Larger Ideal for heavy duty SAW applications

Dimensions: 8.66" W x 4.09" H x 2.25" D (220mm W x 103.8mm H x

57.2mm D)

Weight: 4 lbs (1.8 kg)

FITTINGS FOR WSL-100

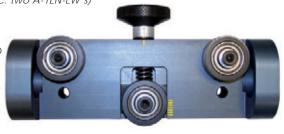
Order A-1LN-K-LW for Inlet/Outlet Kit (inc. two A-1LN-LW's)







A-4HD Quick A-1LN-LW Disconnect Inlet Guide







WGM-PFA-STAND
Adjustable Stand for up to 4 Drums, Spools
or Wood Reels Adjusts to 86" (2.2m)
Inc. 1 arm, additional arms sold separately



WGM-PFA-STAND-4 Spool option for WGM-PFA-STAND



PFA-WM
Remote Mounting
Bracket
For surface mounting



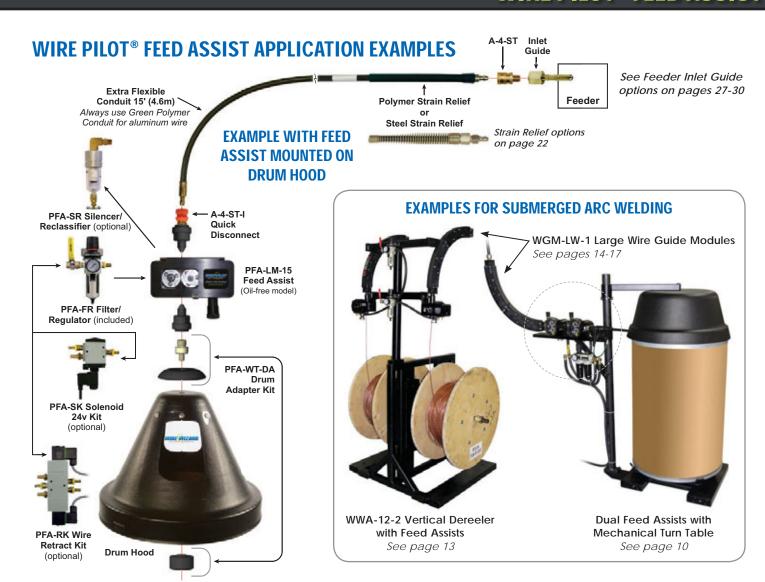
PFA DRIVE ROLLS (sold individually)
All PFA drive rolls are hard chromed & polished for maximum performance and durability.

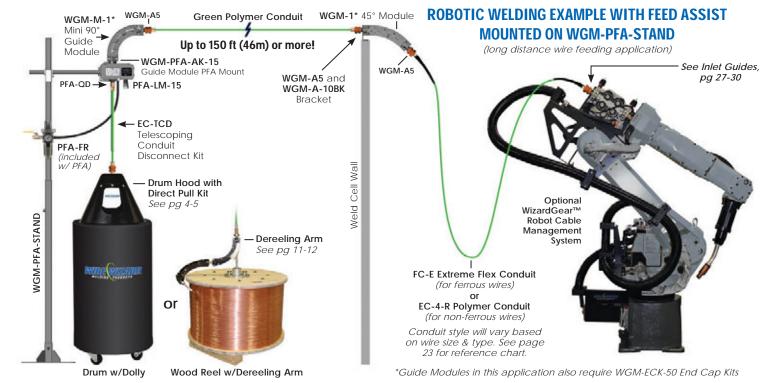
WIRE PILOT® PNEUMATIC WIRE FEED ASSIST

The Wire Pilot® Pneumatic Feed Assist provides an economical way to help your wire feeder move wire through the conduit in applications where the wire must have minimal friction, travel a long distance or where the workload on the wire feeder must be reduced. When combined with the Feed Assist allows the ultimate flexibility when it comes to wire delivery and wire packages can be located 150 ft (46m) or more away from the arc. Using only compressed air, this unit easily relieves several pounds of pulling force from the feed motor. Adjustable torque setting prevents "bird nesting," commonly occurring in aluminum or light wire applications. Compatible with ferrous & non-ferrous wire. Oil-free & oiled motor option. Patented design.

- ► Eliminates drag coefficient inside the conduit
- ▶ Provides "Push-Pull" system to get wire from source to the feeder
- ► Extends conduit life & increases arc-on time
- ► Enables longer conduit runs (150 ft/46m+), enabling centrally located wire packages as well as allowing the use of bulk wire in many applications that would normally require small spools
- Prevents burn backs caused by wire feeding problems
- ▶ Solves many feeding issues with large diameter wire used for SAW
- ► Adapts to other Wire Wizard® wire delivery equipment

WIRE PILOT® FEED ASSIST & ACCESSO	PART NO.
Wire Pilot® Feed Assist with oil-free motor, inc. PFA-FR Filter/Regulator	PFA-LM-15
Wire Pilot® Feed Assist with oiled motor, inc. PFA-FRL Filter/Regulator/Lul	bricator PFA-LM
Inlet/Outlet Quick Disconnect (includes insulator) for PFA-LM-15	A-4-ST-I
Inlet Guide with Quick Disconnect for PFA-LM	A-1B-C
Inlet Guide w/Ceramic Inlet for PFA-LM-15	PFA-35-15
Large Wire Inlet Guide w/Ceramic Inlet for PFA-LM-15	PFA-64
Inlet Guide with 3/8"-18 NPS-F threads (connects to A-4HD disconnect)	for PFA-LM PFA-34
Inlet Guide w/Ceramic Inlet for PFA-LM	PFA-35
Drum Adapter for PFA-LM-15	PFA-WT-DA
Drum Adapter for PFA-LM	PFA-DA
Turn Table Adapter Kit for Wire Pilot® Feed Assist	PFA-WWTT
Adjustable Wire Pilot® Feed Assist Stand for Drums or Spools	WGM-PFA-STAND
Additional Arm for Wire Pilot® Feed Assist Stand	WGM-PFA-STAND-ARM
Wire Spool Holder for Wire Pilot® Feed Assist Stand	WGM-PFA-STAND-4
Wire Pilot® Guide Module Mounting Adapter (for PFA-LM-15 only)	WGM-PFA-AK-15
Wire Pilot® Swivel Kit for Wire Guide Modules (see pages 14-17)	WGM-PFA-SW-15
24-volt Pneumatic Solenoid with Cable	PFA-SK
Wire Retract Kit for Reversing Wire Feed (24-volt)	PFA-RK
Wire Pilot® Dual Mount Bracket	PFA-DM
Wire Pilot® Remote/Wall Mounting Bracket	PFA-WM
Wire Pilot® Pivoting Extension Arm Bracket	PFA-WM-EA
DRIVE ROLLS FOR WIRE PILOT® FEED ASSIS	Т
Feed Assist Drive Roll for .035" (.9mm) wire	PFA-DR-035
Feed Assist Drive Roll for .045" (1.2mm) wire	PFA-DR-045
Feed Assist Drive Roll for .052" (1.3mm) wire	PFA-DR-052
Feed Assist Drive Roll for 1/16" (1.6mm) wire	PFA-DR-1-16
Feed Assist Drive Roll for 5/64" (2.0mm) wire	PFA-DR-5-64
Feed Assist Drive Roll for 3/32" (2.4mm) wire	PFA-DR-3-32
Feed Assist Drive Roll for 1/8" (3.2mm) wire	PFA-DR-1-8
Feed Assist Drive Roll for 5/32" (4.0mm) wire	PFA-DR-5/32
Feed Assist Drive Roll for 3/16" (4.8mm) wire	PFA-DR-3/16







PFA-WT Feed Assist Mounted on Drum Hood

WIRE PILOT® ALL ENVIRONMENT FEED ASSIST

The Wire Pilot® All Environment Wire Feed Assist has all the features and benefits of the original Wire Feed Assist with a weatherproof, heavy duty housing and fittings. Suitable for outdoor or indoor applications requiring protection from the operating environment. Uses same drive rolls as the standard Feed Assist. *Patented design*.

- ► Ideal for use in shipyards, outdoor fabrication and other applications subject to extreme conditions
- Allows for the use of bulk wire in applications normally requiring spools on carts, resulting in significant cost savings on wire
- Enables longer conduit runs
- ► Eliminates drag coefficient inside the conduit
- ► Extends conduit life & increases arc-on time
- Compatible with .035 to 5/32" (1-4mm) ferrous or non-ferrous wire





PFA-WT-DC
Drum Cart Package
with Wheels



PFA-WT-DS
Drum Package
with Fork Pockets

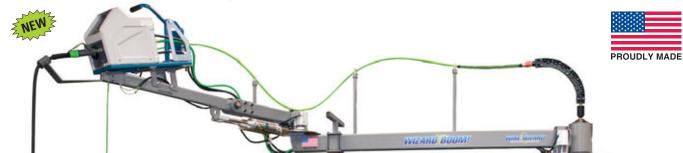
ALL ENVIRONMENT DRUM CART PACKAGES

Designed to withstand the elements, the Wire Pilot® outdoor drum package is ideal for ship-yards as well as other outdoor applications, such as structural welding. With the Feed Assist, bulk wire drums may be located 150 ft (46 m) or more away from the welding area.

- Includes cart with all terrain wheels or fork pockets, weatherproof fittings & drum cover
- ▶ Portable 27" x 34.5" (686 x 876mm) footprint
- ▶ Powder coated, all steel construction
- ► For 20 to 21" round bulk drums
- Package may be customized for your welding application, contact customer service for details

ITEM	PART NO.
Wire Pilot® All Environment Feed Assist	PFA-WT
All Environment Feed Assist Drum Hood Mounting Kit	PFA-WT-DA
All Environment Drum Cart Package, includes wheels	PFA-WT-DC
All Environment Drum Cart Package, inc. fork lift pockets	PFA-WT-DS
All Environment Wire Feed Assist Inlet Kit	PFA-WT-IK
All Environment Direct Pull Kit	WWDP-WT





New Wizard BOOM!™ Welding Booms feature the Wire Guide Module® System along with the Wire Pilot® Feed Assist to provide a versatile welding boom suitable for all types of wire. With superior wire pulling capabilities, the boom can even reliably feed soft 4043 aluminum wire without the need for a push-pull welding gun. Fully articulated primary and secondary arms offer 280° rotation for excellent welder mobility & the portable base (optional) features fork pockets for easy handling.

- ► Fully articulated arms with bearings for maximum welder mobility
- ► Feeder drop down controller tilts up and down the feeder arm for easy wire changeout & maintenance
- Air brakes included for each swiveling joint
- Compatible with bulk drums or spools



Wire Pilot® **Feed Assist**

Creates push-pull system at the wire source for friction free wire delivery (all-pneumatic).



Drop-down Wire Feeder

For easy wire change-out and maintenance. No ladder required!



ITEM	PART NO.
Wizard BOOM!™ with Pedestal Mount Package, 12' (3.7m) Arm and Wire Pilot® Wire Feed Assist	WWB-P-12-1
Wizard BOOM!™ with Pedestal Mount Package, 12' (3.7m) Arm (no Wire Feed Assist)	WWB-P-12-2
Wizard BOOM!™ with Pedestal Mount Package, 15' (4.6m) Arm and Wire Pilot® Wire Feed Assist	WWB-P-15-1
Wizard BOOM!™ with Pedestal Mount Package, 15' (4.6m) Arm (no Wire Feed Assist)	WWB-P-15-2
Wizard BOOM!™ with Column Mount Package, 12' (3.7m) Arm and Wire Pilot® Wire Feed Assist	WWB-C-12-1
Wizard BOOM!™ with Column Mount Package, 12' (3.7m) Arm (no Wire Feed Assist)	WWB-C-12-2
Wizard BOOM!™ with Column Mount Package, 15' (4.6m) Arm and Wire Pilot® Wire Feed Assist	WWB-C-15-1
Wizard BOOM!™ with Column Mount Package, 15' (4.6m) Arm (no Wire Feed Assist)	WWB-C-15-2
Portable Base for Wizard BOOM! System (includes tray for wire drum and gas cylinder holder)	WWB-BASE

All booms include air brake system, wire feeder mounting plate, welding gun holder and standard installation



Blue Magic®			
ITEM	PART NO.		
32 oz Spray Bottle	EAS1000-C32		
1 gal Bottle	EAS1000-C1		
5 gal Container	EAS1000-C5		
55 gal Drum	EAS1000-C		
275 gal Bulk Tote	EAS1000-CT		
5 gal Concentrate	EAS1000-C-CON		
55 gal Concentrate	EAS1000-C-CON-55		
Manual Drum Pump (55	gal) EAS1000-DP		
Drum Wrench (55 gal)	EAS1000-DW		

Blue Mag	gic® HD
ITEM	PART NO.
32 oz Spray Bottle	EAS1000-HDC32
1 gal Bottle	EAS1000-HDC1
5 gal Container	EAS1000-HDC5
55 gal Drum	EAS1000-HDC



Blue Chill®	
ITEM	PART NO.
32 oz Spray Bottle	EAS1000-BC32
1 gal Bottle	EAS1000-BC1
5 gal Container	EAS1000-BC5
55 gal Drum	EAS1000-BC
275 gal Bulk Tote	EAS1000-BCT

Anti-spatter samples available upon request

BLUE MAGIC ® ANTI-SPATTER & NOZZLE CLEANER

A cost effective, environmentally safe product, this new generation of anti-spatter provides superb performance even in high temperature applications. Biodegradable formula contains no harmful chemicals and is noncombustible. And, because it contains one of the lowest water contents available, *you get protection, not water*.

- Surfactants provide excellent wetting & lubricity in torches
- ▶ Protects against spatter build-up & char residue
- ► Keeps clean-ups to a minimum
- ► Contains no silicone—easily painted over
- ▶ Neutral pH level inhibits multi-metal corrosion
- ▶ Will not evaporate, keeping lines & nozzles clog-free
- ► Contains biocide, providing longer shelf life in warm climates
- ► Available in concentrated form in 5 gallon buckets

 1 bucket makes 55 gal. anti-spatter, ideal for overseas shipping

BLUE MAGIC ® HD HIGH DUTY CYCLE ANTI-SPATTER

Introducing our toughest anti-spatter yet! The new Blue Magic® HD anti-spatter is specially formulated for extremely high temperature, long duty cycle applications.

- ► Special formula provides maximum protection
- ▶ Will not evaporate, even under conditions with extreme heat
- ▶ Reduces downtime for clean-ups in long duty cycle applications that generate extreme heat and excessive spatter

BLUE CHILL® ANTI-SPATTER & NOZZLE CLEANER

Increase weld productivity with this specially blended formula that not only protects surfaces from spatter, slag, and scale but also **quickly cools down hot nozzles!** No mixing required.

- Extends nozzle and contact tip life
- ► Remains stable and will not evaporate
- ► Environmentally safe, non-toxic, biodegradable

RUST INHIBITOR ADDITIVE PART #EAS1000-RI

Help **prevent flash rusting** with our Rust Inhibitor additive formulated for mixing with either Blue Magic[®] or Blue Chill[®] Anti-spatter. 1 gallon (3.8 L).

- ► Helps eliminate flash rusting, reducing prep time for part finishing
- ➤ One gallon is enough to mix up to 55 gallons of anti-spatter (mixing ratio depends on application)



Drum Pump & Drum

Wrench for 55 Gal.

5-GALLON MANIFOLD KIT Model 5GMK

This popular industrial size also dispenses **Blue Magic®** or **Blue Chill®** anti-spatter to **Torch Wizard®** pneumatic reamers and nozzle mist applicators. Easily integrated into any weld cell stations.

- Smaller footprint is ideal where space is an issue
- ▶ Pneumatic pump supplies 1.92 gallons per minute at 75PSI
- ▶ Bulk dispensing system easily supplies up to 15 work stations

Specifications

Height: 27" (685.8 mm) Width: 11.25" (285.7 mm)

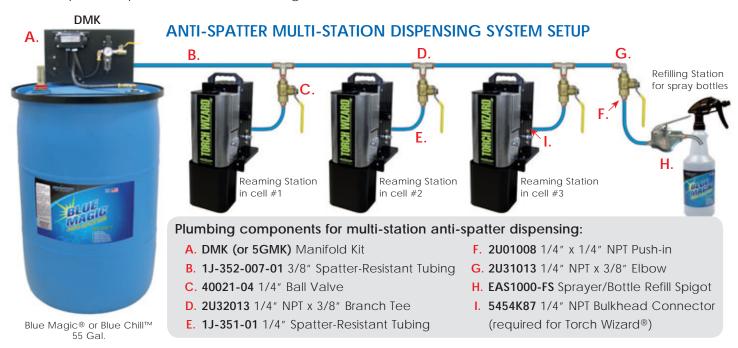
Depth: 14" (355.6 mm) Weight: 8 lbs (3.6 kg)



DRUM MANIFOLD KIT Model DMK

Designed to deliver bulk **Blue Magic®** or **Blue Chill®** anti-spatter to multiple **Torch Wizard®** nozzle cleaning and/or spraying stations, eliminating the need to refill small, gravity fed containers on a frequent basis. **Optional gauge** monitors fluid level for easier maintenance. Easy to install.

- Lowers operating costs by allowing the use of bulk anti-spatter, reduces downtime for refilling
- ▶ Supplies anti-spatter to multiple stations with pneumatic pump (pumps up to 1.92 gal. per min. at 75PSI)
- Less space required due to one feeding source



ANTI-SPATTER BOWL

Model LJ-007

The Anti-Spatter Bowl prevents spilling and the need for constant refills. Using a 32 oz. bottle, gravity feeds the solution as needed. Perfect for nozzle dipping in manual/robotic applications.



HAND-HELD SPRAYER

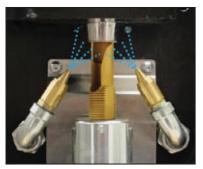
Model TS-H-12

Designed for spot-spray applications of **Blue Magic®** or **Blue Chill®** anti-spatter, this hand-held spray gun is ideal for coating "weld zone" areas. Can be used with our bulk dispensing kits.



TORCH WIZARD® NOZZLE CLEANING STATIONS





TORCH WIZARD® NOZZLE CLEANING STATION

New & improved design for quick integration! Torch Wizard® Automatic Robotic Nozzle Cleaning Stations assist in maintaining quality and productivity in your MIG welding cell by quickly and efficiently removing spatter build-up in the gas nozzle. Anti-spatter is applied evenly through two spray jets, allowing for simultaneous reaming & spraying – reducing cycle time by up to 50%! Two year warranty with exclusive use of Blue Magic® / Blue Chill® anti-spatter.

Product Features

- ▶ Extends torch consumable life by removing spatter build-up
- ▶ Sprays & reams simultaneously, reducing cycle time by up to 50%
- ▶ Plug & Perform easily integrates into existing configurations commonly used with other reaming stations (5-pin connection)
- ► Clog-free anti-spatter spray jets evenly coat nozzle & tip
- ▶ High torque motor prevents stalls, reducing downtime
- No circuit boards and fewer moving parts means more reliable operation and lower maintenance costs
- ▶ Adjustable v-block with four points of contact on the nozzle
- ► Enclosed operating environment keeps weld cell clean
- ► Easy-open covers provide quick access to internal components
- ► TiN coated reamer blades offer efficiency and longevity
- ► EtherNet or DeviceNet capable (with option)
- ▶ Pneumatic Wire Cutters & Tool Center Point Adapters available
- ► Economical all-pneumatic station also available (see page 39)

NOTE: Each base unit requires a reamer blade (based on I.D. of gas nozzle being used) and power/control cable. Required FRL is available for purchase.

Simultaneous reaming and spraying can cut cycle time in half!

See page 41 for full parts list

Torch Wizard® Specifications

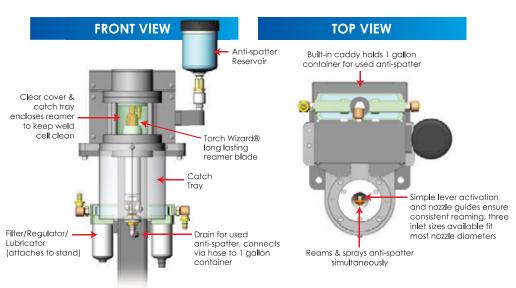
TOP VIEW SIDE VIEW FRONT VIEW (W/O COVER) Manual Operation Reams & sprays Anti-spatter 10.81" (274.6 mm) (for easy setup/ Location for optional simultaneously Reservoir testing) Tool Center Point from sprayers Carry Handle for easy mobility Durable 20.45" (288.4 mm Stainless Steel Cover (519.4 mm Adjustable v-block for Wire Cutter Power/Control Port EL-NCS-TCP-F-R (optional) Catch all nozzle diameters (EtherNet/DeviceNet Optional TCP Trav optional on select models) Mount

TORCH WIZARD® AP All PNEUMATIC REAMING STATION

Models EL-NCSP, EL-NCSP-A & EL-NCSP-AC

The new Torch Wizard® AP Nozzle Cleaning Station features reliable all pneumatic operation, making setup and operation a breeze! Three nozzle inlets are available to accommodate virtually all torch sizes, and adjustable nozzle guides ensure consistent reaming every time. An enclosed operating environment with catch tray and drain keeps the weld cell clean. The built-in caddy holds a one gallon container for used anti-spatter. Two year warranty with exclusive use of Blue Magic® / Blue Chill® anti-spatter.

- ► All pneumatic operation, ideal for either robotic or hand-held welding applications
- ► Three inlet sizes with adjustable guides for nozzles up to 1 1/16" (27mm) in diameter
- ▶ Sprays & reams simultaneously, reducing cycle time by up to 50%
- ▶ Enclosed operating environment keeps the weld cell clean
- Available with or without anti-spatter sprayer or optional wire cutter





The Torch Wizard® TA Tandem Arc Nozzle Cleaning Station is specially designed for removing spatter build-up in tandem arc torches. Anti-Spatter is applied via the dual sprayers allowing reaming and spraying simultaneously for shorter cleaning cycles and higher part production. Two year warranty with use of Blue Magic® / Blue Chill® anti-spatter.

- Quickly and effectively cleans both tips on tandem arc torches, requiring only a simple rotation of the torch to ream each side
- ▶ Nozzle clamp designed specifically for securing twin arc torches
- ▶ Includes all the same features and uses the same reamer blades as the single Torch Wizard® Nozzle Cleaning Station

See page 41 for full parts list





TORCH WIZARD® REAMER BLADES & ACCESSORIES

TITANIUM NITRIDE TiN Coated for Maximum Durability



REAMER BLADES

TORCH WIZARD® REAMER BLADES

Made from alloy tool steel and coated with titanium nitride (TiN) for enhanced durability, our reamer blades maintain their sharp cutting edge and resist breakage. Blades are universal and can also be adapted to other major reaming station manufacturers. Sizes for all nozzle IDs & lengths available (see table on page 41).

- ► TiN coating increases blade life
- ➤ Single and double flute blades available in a variety of sizes for compatibility with all torch nozzle styles
- Cost effective replacement blades available for other reaming station manufacturers



REAMER BLADES

Torch Wizard® Wire Cutter
Included on AC & ACD models.

INTEGRATED WIRE CUTTER

Included on AC and ACD Models

- ▶ Provides simple, automated way to cut wire sizes from .035 to .062
- ► Consistent wire stick-out provides accurate wire location
- ▶ Robust, hardened steel blade offers maximum wear resistance & extended life
- ► Fully integrated with the AC and ACD model reaming stations, no additional air or power cables required (except on the EL-NCSP-AC all pneumatic reamer, which requires 24v power)



STAND ALONE WIRE CUTTER

Model EL-NCS-WCS-SA-12

- Provides simple, automated way to cut wire sizes from .035 to .062
- Compact size allows mounting in the ideal location inside weld cell
- Requires 24v and standard 80-100 psi air supply



EL-NCS-WCS-LW LARGE WIRE CUTTER (EL-NCS-WCS-LW-1 excludes valving)

LARGE DIAMETER AND TANDEM WIRE CUTTER

Model EL-NCS-WCS-LW

- ➤ Cleanly cuts wire as thick as 3/16" (4.8mm) or up to two 5/32" (4mm) wires simultaneously
- Allows long angle cuts for smoother arc starts
- Robust O-1 hardened steel blade
- Requires 24v & standard 80-100 psi air supply



EVACUATION CHUTE FOR HIGH PRODUCTION APPLICATIONS

Model EL-NCS-EC

- ► Replaces standard catch pan for high volume welding applications
- Designed to empty spatter and other waste into 5 gallon buckets, requiring less maintenance for emptying
- Prevents potential damage to air motor and other components due to an overflowing catch pan

TORCH WIZARD® NOZZLE CLEANING STATIONS

TORCH WIZARD® CLEANING STATIONS FULL PARTS LIST

ITEM	PART NO.
Reaming Station w/integrated anti-spatter spray	EL-NCS-A-16
Reaming Station w/integrated anti-spatter spray & wire cutter	EL-NCS-AC-16
Reaming Station w/integrated anti-spatter spray - 5-pin model for quick integration	EL-NCS-A-16-D
Reaming Station w/integrated anti-spatter spray & wire cutter - 5-pin model for quick integration	EL-NCS-AC-16-D
Reaming Station (TA) for Tandem Arc Torches, w/anti-spatter sprayer	EL-NCS-A-TA-16
All Pneumatic Station (AP), reamer only (specify nozzle diameter)	EL-NCSP
All Pneumatic Station (AP) with anti-spatter sprayer (specify nozzle diamet	ter) EL-NCSP-A
All Pneumatic Station (AP) with anti-sprayer & wire cutter (specify nozzle of	dia.) EL-NCSP-AC
36" (914mm) Stand (custom heights available) for EL-NCS models	EL-NCS-STAND
36" (914mm) Stand (custom heights available) for EL-NCSP models	EL-NCSP-STAND
Filter/Regulator/Lubricator	EL-NCS-FRL-14
Testing and Diagnostic Box for EL-NCS A-16-D/AC-16-D Models	EL-NCS-TB-5
Testing and Diagnostic Box for EL-NCS A/AC/ACD Models	EL-NCS-TB
Stand for Tool Center Point - 44.9" H (1141mm) from base to point	EL-NCS-TCP-F-S
Tool Center Point Mount (attaches to reaming station stand)	EL-NCS-TCP-F-R
Integrated Wire Cutter (included on AC & ACD models)	EL-NCS-WCS-12
Stand Alone Wire Cutter	EL-NCS-WCS-SA-12
Evacuation Chute for High Volume Applications	EL-NCS-EC
DeviceNet Option	EL-NCS-ACD-DN
EtherNet Option	EL-NCS-ACD-EN
5 Pin, 20 ft Power/Control Cable (for EL-NCS-A-16-D & AC-16-D models)	EL-NCS-CC5-20-3
7 Pin, 20 ft Power/Control Cable (for EL-NCS-A-16 & AC-16 models)	EL-NCS-CC7-20-3
9 Pin, 20 ft Power/Control Cable (for some older & customized models)	EL-NCS-CC9-20-3

TORCH WIZARD® REAMER BLADES

ITEM	DIA	FLUTES	THREAD	HEIGHT	PART NO.
Reamer Blade	13mm	2	Female	2.558"	EL-NCS-13MM
Reamer Blade	13mm	1	Female	2.687"	EL-NCS-TL-13MMF
Reamer Blade	13mm	1	Female	2.433"	EL-NCS-TS-13MMF
Reamer Blade	15mm	2	Female	2.558"	EL-NCS-15MM
Reamer Blade 🗳	1/2"	2	Female	2.558"	EL-NCS-500
Reamer Blade 🗳	1/2"	1	Female	2.687"	EL-NCS-TL-50F
Reamer Blade 🗳	1/2"	1	Female	2.433"	EL-NCS-TS-50F
Reamer Blade 🗳	5/8"	2	Female	2.558"	EL-NCS-625
Reamer Blade 🗳	5/8"	1	Female	2.687"	EL-NCS-TL-62F
Reamer Blade 🗳	5/8"	1	Female	2.433"	EL-NCS-TS-62F
Reamer Blade 🗳	3/4"	2	Female	2.558"	EL-NCS-750
Reamer Blade (AP Model)	1/2"	2	Female	2.558"	EL-NCS-500-A
Reamer Blade (AP Model)	5/8"	2	Female	2.217"	EL-NCS-625-A
Reamer Blade (AP Model)	15mm	2	Female	2.558"	EL-NCS-15MM-A

MALE THREADED REAMER BLADES FOR OTHER REAMING STATIONS

Reamer Blade	13mm	1	Male (3/8"-24)	2.433"	EL-NCS-TS-13MM
Reamer Blade	1/2″	2	Male (3/8"-24)	2.558"	EL-NCS-50-M
Reamer Blade 🤣	1/2″	1	Male (3/8"-24)	2.687"	EL-NCS-TL-50
Reamer Blade 🤣	1/2"	1	Male (3/8"-24)	2.433"	EL-NCS-TS-50
Reamer Blade	1/2″	1	Male (3/8"-24)	2.437"	EL-NCS-TML-50
Reamer Blade 🍎	5/8″	2	Male (3/8"-24)	2.558"	EL-NCS-625-M
Reamer Blade 🤣	5/8″	1	Male (3/8"-24)	2.687"	EL-NCS-TL-62
Reamer Blade 🤣	5/8″	1	Male (3/8"-24)	2.433"	EL-NCS-TS-62
Reamer Blade	5/8″	1	Male (3/8"-24)	2.437"	EL-NCS-TML-62

STANDS AND TCP ADAPTERS





TESTING & DIAGNOSTIC BOX

Models EL-NCS-TB-5 (5-pin) and EL-NCS-TB (7-pin)

The Torch Wizard® Reaming Station Test Box is a recommended maintenance peripheral for periodically testing and fine tuning your reaming station. Functions include: Sink/Source, Motor Slide Up/Down, Nozzle Clamp, Anti-spatter Spray, Wire Cutter. Includes 110v AC unit and a 5-pin cable (use model EL-NCS-TB for 7-pin A/AC models).

Blades compatible with PowerBall® Torch Consumables

Please call customer service for correct retrofit reamers for: ABICOR Binzel®, Intertech®, Tregaskiss® and Nasarc®



WELD CELL MONITORING AND OPTIMIZATION SYSTEM





OPTIMIZE WELD CELL PERFORMANCE & OEE

The new **Weld Central™** is a Process Optimization System that monitors and tracks key (time-stamped) process variables, including current, voltage, wire feed speed, gas flow & feed motor current. This information can be utilized for both process optimization and determining the weld cell **OEE** (**Overall Equipment Effectiveness**). Combined with the Wizard View™ software, the Weld Central™ is the ultimate weld cell performance monitoring system!

Sensor Module Options

Note: All sensors along with the controller and software are included in the complete kit (WC-1-KIT)



Wire Feed Sensor

Measures wire activity, including feed speed and total wire usage.



Voltage & Current Sensor Measures arc voltage

Measures arc voltage and amperage from the power source.



Gas Flow Sensor

Measures/monitors volume of gas used as CFH or LPM, gas surges & total gas used (can function as a totalizer). May also be used as a standalone tool for monitoring gas flow (see page 44).



Motor Current Sensor

Measures amperage draw on the feeder motor, which is used for detecting wire feeding issues.

Hardware Features

- ► Monitor robotic or semi-automatic weld cells through a PC or mobile device using the **Wizard View[™]** software, where collected data can be viewed, charted & exported in a user friendly web browser interface
- **Equipment agnostic** utilizes sensors compatible with all brands of wire feeders and power sources
- ▶ More than just a data acquisition system may be connected to a PLC to prevent costly weld quality issues
- ▶ Four Active Outputs that can activate an alarm or stop the welding process through the PLC:
 - Arc Stability: Triggered when voltage, amperage, wire feed or gas flow exceed user defined thresholds
 - Weld Quality: Triggered when voltage, amperage, wire feed & gas flow meet user-defined limits
 - Assembly Passed: Triggered if data from all welds is within weld ID and assembly parameters
 - Assembly Failed: Triggered when data does not meet the user-defined parameters for an assembly
- ▶ Three Active Inputs for resetting outputs, reset for new wire drum & reset for new gas canister (if applicable)
- ▶ Internal memory on controller stores up to 4,000 weld summaries
- Monitor a single torch or multiple torches through a network or mobile router with Wizard View™ software



WELD CENTRAL MONITORING & DATA ACQUISITION SOFTWARE



Wizard View™ 2.0 Dashboard (available Summer 2017)

Wizard View™ provides an easy to use interface for the Weld Central™ System that graphs and logs data, alerts, wire & gas usage and other key welding performance information. The software collects data from any torch with the Weld Central™ hardware installed. Simply browse to the desired torch to see a visual representation of the welding data along with the wire and gas usage information.

- Monitor, graph and export welding data to a CSV file
- ▶ Dashboard displays all welding data in an interactive chart and shows overview of the total number of welds, wire usage, gas usage, power usage & arc on time for a selected time frame
- ▶ Data may be displayed for each weld assembly and by weld schedule
- ▶ Logs and displays user defined alerts so problems can quickly be detected and resolved
- Provides much of the data necessary to determine weld cell OEE (overall equipment effectiveness)

System Architecture



ITEM	PART NO.
Weld Central™ Complete Kit - All hardware, sensors & cables for one torch with Wizard View™ Software	WC-1-KIT
Weld Central™ Controller with Wizard View™ Software Package (required hardware & software)	WC-1-CB
Wire Feed Sensor	WC-1-WS
Voltage & Current Sensor	WC-1-VA
Gas Flow Sensor/Monitor	WC-1-GM
Feed Motor Current Sensor	WC-1-CS
I/O Cable for Connection to PLC/Controller (included in WC-1-KIT)	WC-1-WS-I/O

GAS FLOW MONITORING & OPTIMIZATION





WELD CENTRAL™ GAS FLOW MONITOR

The Weld Central™ Digital Gas Flow Monitor provides an easy way to monitor shielding gas flow in robotic or semi-automatic welding applications. Available in both an in-line and portable version, it allows monitoring and totalizing incoming gas flow or measurement and verification of gas flow at the nozzle.

- ► In-line version can function as a gas totalizer and may also be connected to a PLC to warn or interrupt the welding process if an out-of-limits condition is detected
- ➤ Portable version includes hose and filter assembly that fits all standard nozzle sizes, along with a rechargeable li-ion battery that lasts up to 24 hours
- ▶ Digitally displayed flow rate of 5 to 255 SCFH (2.4-120 LPM) with 1 SCFH resolution in English or Metric units
- ▶ Pre-calibrated with several gas mixture options to cover most welding applications, including: Argon, Argon/CO2 (90/10), Argon/CO2 (80/20), Argon/CO2 (85/15), Argon/CO2 (75/25), Helium and CO2
- Compatible with the Weld Central™ Data Acquisition System

MANUAL GAS FLOW GAUGES

Measures the actual flow of shielding gas from the MIG/TIG torch, allowing adjustments to be made at the cylinder gauge if necessary. An economical solution for improving overall welding performance.

- ▶ Measures gas flow consumption (cfh or lpm) at nozzle
- ► EL-GFM features flexible hose for easy operator readings on robotic torches; use EL-GFM-1 for semi-automatic torches





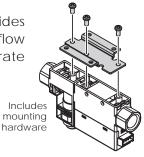
Retail packaging



WELD SHIELD GAS FLOW SWITCH

New & improved model! This compact flow switch provides reliable and accurate detection of excessive or insufficient flow rate at the weld point. A digital display offers visual flow rate indication for quick and easy switch adjustment.

- Ideal for protecting against gas flow failure sends 24v signal to PLC for alarm or to stop the welding process
- Precalibrated for common welding gas mixtures
- PNP or NPN models available



ITEM	PART NO.
Weld Central™ Digital Gas Flow Monitor - In-line Model (includes gas fittings)	WC-1-GM
Weld Central™ Digital Gas Flow Monitor - Portable Model for checking flow at the nozzle (includes hose assemble	y) WC-1-GM-P
Weld Central™ Digital Gas Flow Monitor Calibration Service (yearly recalibration recommended)	WC-1-GM-RECAL
Manual Gas Flow Gauge for Robotic Applications	EL-GFM
Manual Gas Flow Gauge for Semi-automatic Applications	EL-GFM-1
Weld Shield Gas Flow Switch - PNP Model	EL-RVMU-14
Weld Shield Gas Flow Switch - NPN Model	EL-RVMU-14-NPN





Gas Wizard™ Inert Gas Savers are designed to reduce gas consumption by restricting the gas surge that occurs at arc initiation. The new Adjustable Gas Saver is ideal for virtually all welding applications and allows fine tuning of the gas flow, which is an added benefit for facilities utilizing long bulk gas delivery systems with pressure drops.

- ▶ Reduces gas consumption in MIG or TIG applications
- ► Restricts gas surge upon arc starts, screen prevents blockages
- ▶ Gas savers available for the inlet or outlet side of gas solenoid
- Flow jets can be changed depending on application

Adjustable Gas Savers - GFJ-ADJ-A, B or C Saves gas and allows fine tuning of gas flow.

NON-ADJUSTABLE GAS SAVERS

Gas Saver for Standard Outlet	i
GFJ-1 (Jet #1) JET	Gas Flow
GFJ-2 (Jet #2)	· · · · · · · · · · · · · · · · · · ·
GFJ-3 (Jet #3)	A CHANGE
	SCREEN

Gas	Saver	for	Inlet	Side	of	Solenoic	ł

Gas saver for inlet side of solehold						
GFJ-1A GFJ-2A GFJ-3A	Gas Flow	· · ·				

Gas Saver	for Outlet Si	de of Solenoid
GFJ-1B	JET	TANKS.

GFJ-1B	JET	THE PARTY OF THE P	Gas Flov
GFJ-2B	(Mt)	- Investigate	
GFJ-3B		Billia a	
	11		

Gar

as saver for	illier grae or gole	enoia
	as DW 1	JET

Gas Saver	with	RSPP	Threads	(Fronius®	style

GFJ-F1 GFJ-F2 GFJ-F3	JET		Gas Flow
----------------------------	-----	--	-------------

GFJ-P-SKS-2 In-line gas saver/ power pin for SKS® torches

GF GF GF



GAS SAVERS - INCLUDE SCREENS & JETS 1, 2 or 3 (JETS INDICATED NUMERICALLY IN PART NUMBER)

PART NO.	THREADS	JET LOCATION
GFJ-ADJ-A	5/8"-18 Male x 5/8"-18 Female (Adjustable)	-
GFJ-ADJ-B	1/4"-18 Male NPT x 5/8"-18 Female NPT (Adj.)	-
GFJ-ADJ-C	1/4"-18 Male NPT x 1/4"-18 Female NPT (Adj.)	-
GFJ-1, 2 or 3	1/4"-18 Male NPT x 5/8"-18 Female	Female End
GFJ-1A, 2A or 3A	5/8"-18 Male x 5/8"-18 Female	Male End
GFJ-1B, 2B or 3B	5/8"-18 Male x 5/8"-18 Female	Female End
GFJ-1D, 2D or 3D	1/4"-18 Male NPT x 1/4"-18 Female NPT	Male End
GFJ-F1, F2 or F3	1/4"-19 Male BSPP x 1/4"-19 Female BSPP	Female End

GAS SAVER FLOW JETS

PART NO.	JET	30 PSI	35 PSI	40 PSI	45 PSI	50 PSI	55 PSI
GFJ-1*	1	10 CFH	11 CFH	12 CFH	13 CFH	14 CFH	15 CFH
GFJ-2*	2	29 CFH	33 CFH	36 CFH	39 CFH	42 CFH	45 CFH
GE J-3*	3	51 CFH	55 CFH	61 CFH	66 CFH	71 CFH	76 CFH

Jet #1 - TIG • Jet #2 - MIG, Light Wire • Jet #3 - MIG, Heavy Wire

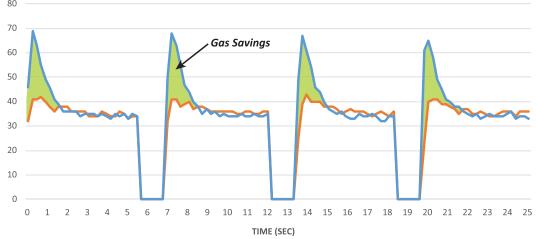
IN-LINE TORCH POWER PIN GAS SAVERS

GFJ-P-SKS-2 In-line gas saver / power pin for SKS torches (inc. jet #2)

GAS SAVINGS AS A RESULT OF ELIMINATING GAS SURGE UPON ARC START

Spikes represent gas surge at arc start without gas saver installed





DRUM & REEL HANDLING EQUIPMENT









UNIVERSAL DRUM	PART NO.
Universal Drum Dolly	FDD-MD
Large Universal Dolly	FDD-MD-LD
26" (660MM) ROUNI	D DOLLY PART NO.

26" Diameter Dolly FDD-26-12 **HEAVY DUTY DRUM CART** ITEM PART NO. Up to 24" Drum Diameter **FDSC**

UNIVERSAL DRUM DOLLIES

Model FDD-MD (FOR UP TO 25" DRUMS/BOXES)

Model FDD-MD-LD (FOR 25"-30" DRUMS/BOXES - INC. 4" CASTERS)

Product Features

- Reversible design for large and small wire packages
- Accommodates round, square & octagon wire drums up to 25" (635mm) in diameter. Use FDD-26-12 or WWSD for 26" packages.
- Textite wheels and roller bearings for ease of rollability
- Standard UPS shipping available

Specifications

Deck Ht: 4.25" (108mm) Weight: 24 lbs (10.4kg)

Capacity: 1200 lbs (544 kg)

HEAVY DUTY 26" (660MM) DRUM DOLLY

Model FDD-26-12

Product Features

- ▶ Wide stance with four swivel casters for ease of mobility
- ▶ 3" (76.2mm) non-conductive Textite wheels and roller bearings
- Optional brake available (add "B" to part number)
- ► Fits 26" (660mm) round drum packages
- Suitable for UPS shipping

Specifications

Deck Ht: 4.75" (120.6 mm) Weight: 24 lbs (10.4kg)

Capacity: 1200 lbs (544 kg)

HEAVY DUTY DRUM STAGING CART Model FDSC

Designed for one person to transport up to 1200 pound (544 kg) wire drums. The hinged handle stores upright for pushing and outward to give added leverage for easy steering. Non-conductive Textite 6" (152.4mm) roller bearing wheels and 3" (76.2mm) front swivel caster provide smooth movement and maximum maneuverability over all surfaces.

Added Benefits

- ▶ Transports drums up to 24" (610mm) in diameter
- Optional positive locking brake system (add "B" to part number)
- Suitable for UPS shipping

Specifications

Deck Ht: 1.5" (38.1mm) Height: 40" (1.02m) Depth: 26" (660.4 mm) Width: 30" (762mm) Capacity: 1200 lbs (544 kg) Weight: 43 lbs (19.5kg)

DRUM LIFTER Model FDL

- ▶ Spring loaded clamp design holds drum firmly in place
- ► For fiber or steel drums (chimed only)
- ► Accepts diameters from 18.5" to 26" (470 mm to 660.4 mm)
- ► 1200 lbs (544 kg) capacity

NOTE: Drum rim must be within 1" (25.4mm) of the top of the drum.

Content weight must not exceed the drum manufacturers' packing limit.

Drums must be closed with lids properly sealed. Not for lifting over 10" (254mm) high.

FORK LIFT ADAPTER

Model FDL-FA (for standard forks)
Model FDL-FA-6 (for 6" wide forks)

- Adjustable T-handle keeps adapter from sliding off fork
- ▶ Safety style clasp **secures** adapter to drum lifter
- ► 1200 lbs (544 kg) capacity



- ▶ Lifts both chimeless and chimed fiber drums
- ► Four locking jaws firmly "bite" the drum without causing damage
- ► Accepts 20" to 26" (508 to 660mm) diameters inc. Accu-Trak® & Marathon Pak®
- ▶ 1200 lbs (544 kg) capacity

ISO DRUM LIFTER (ADJUSTABLE) Model FDL-HS

- ▶ Easily attaches to chimeless ISO drums with straps or handles
- Accepts 20" to 26" (508 to 660mm) drum diameters including Accu-Pak® and Marathon Pak®
- ▶ 1200 lbs (544 kg) capacity

21" DRUM LIFTER (NON-ADJUSTABLE) Model FDL-21-12

- ► Accepts 20" to 21" (508 to 533mm) drum diameters
- ▶ 1200 lbs (544 kg) capacity

24" DRUM LIFTER (NON-ADJUSTABLE) Model FDL-24-12

- ► Accepts 23" to 24" (584 to 610mm) drum diameters
- ▶ 1200 lbs (544 kg) capacity

29" DRUM LIFTER (NON-ADJUSTABLE) Model FDL-29

▶ For 29" (737mm) wide drums or boxes - 1200 lbs (544 kg) capacity



FDL DRUM LIFTER WITH FDL-FA



FDL-C DRUM SHARK WITH FDL-FA







DRUM & REEL HANDLING EQUIPMENT



OVERHEAD SAFETY LIFTER

The new Overhead Safety Lifter is designed to safely lift drums and environmental packages of wire overhead by attaching to Wire Wizard® drum and skid dollies. Each lifter includes the lifting device, heavy duty chains and adapter kit for drum and skid dollies. Fork lift adapter also available (see page 45).

Product Features

- Safely lifts drums or environmental packs overhead
- Ideal for overhead welding applications where drums are above the cell
- ► Compatible with the following Wire Wizard® drum & skid dollies: FDD-MD, FDD-26-12 & WWSD
- ▶ 1500 lbs (680 kg) capacity
- Required for lifting drums over 10" (254mm) off the floor

ITEM	PART NO.
Overhead Safety Lifter Kit with FDD-MD Dolly (up to 25"/635mm drums)	FDL-OSL-MD-K
Overhead Safety Lifter Kit with FDD-26-12 Dolly (for 26"/660mm drums)	FDL-OSL-26-K
Overhead Safety Lifter Kit with WWSD Skid Dolly	FDL-OSL-SD-K

To order the lifter for an existing dolly, remove -K from the appropriate part number above



Capable of handling up to 1200 pounds, this dolly can be used with all drums/boxes on skids or pallets measuring 27 inches square or smaller. Four solid Textite roller bearing wheels make transporting a drum simple. Can be assembled in a lip up or lip down configuration depending on cus-PALLET (SKID) DOLLY tomer needs. Call customer service for larger pallet sizes.

Specifications

Deck Ht: 4.5" (114.3mm) Capacity: 1200 lbs (544 kg)

Dimensions: 5" (127mm) H x 27.5" (698.5mm) L x 27.5" (698.5mm) W

Weight: 38 lbs (17.24kg)



WWSD

HEAVY DUTY WOOD REEL STAGING CART Model WRSC

Product Features

- Specifically designed to transport wood reel and cover
- ► All steel construction built for rugged industrial use
- Convenient, removable self-storing handle
- ▶ 4" (101.6 mm) Textite swivel and rigid roller bearing casters
- Locking swivel wheels standard

Specifications

Deck Ht: 6.75" (171.5mm) Dimensions: 36" (914.4 mm) H x 36" (914.4 mm) L

118 lbs (53.6kg) Weight: Capacity: 1400 lbs (635.6kg)

All dollies and carts are shipped unassembled (assembly available)



WIRE FEED SPEED SENSOR Models HHSS & HHSS-12

This hand-held, battery operated tachometer incorporates the latest single chip micro-circuit technology for high reliability and low maintenance. Capable of measuring and retaining RPH, RPM, FPH, FPM and MPH. Standard accessories include: 3-1/2" (89mm) extension shaft, one funnel and two cone adapters, master wheel (6" / 152mm) and carrying case. Use the new model HHSS-12 for taking readings at the torch end.



HHSS-12 WIRE FEED SENSOR for readings at torch

Product Features

- ▶ Plugs into existing wire system and conduits
- ▶ Handles wire diameters from .030 to .125 (0.8 to 3.2 mm)
- Rugged aluminum construction with Delrin wire guide head
- ▶ Displays wire speed with automatic floating decimal point
- ▶ Large 13 test memory selectable to 5 minutes or more

Manual application only. Does not take continuous readings.



HHSS WIRE FEED SENSOR for in-line readings

WWPT WIRE DRAW

GAUGE

WIRE DRAW GAUGE Model WWPT

The electronic Wire Wizard® WWPT is designed to accurately measure the draw weight of all diameters of weld wire pulling through the conduit. This allows the operator to determine if the conduit needs to be changed by the amount of strain the wire is creating on the feed motor. Hand-held, battery powered (9-volt).

Product Features

- ► Capable of averaging 10 pulls of wire, storing the largest draw
- ► Measures in English or metric at the touch of a button
- ► Easy to read 5-digit LCD display
- ► Ergonomic plastic housing with standard storage case
- ► Max pull weight: 12 lb (5.4 kg)





NOZZLE CLEANING TOOLS

- ► Highly effective for cleaning spatter
- ► Helps prevent heat build-up and prolongs MIG nozzle life
- ► Hand-held design in a choice of five sizes



PART NO.	TIP	NOZZLE
EL-10	1/4" (6.3 mm)	3/8" (9.5 mm)
EL-20	5/16" (7.9mm)	1/2" (12.7 mm)
EL-30	5/16" (7.9mm)	5/8" (15.8mm)
EL-40	3/8" (9.5 mm)	5/8" (15.8mm)
EL-50	13/32" (10.3 mm)	3/4" (19.05 mm)

EC POLYMER CONDUIT CUTTER & COUNTERSINK TOOL

Model EC-CUTTER & EC-DB

The heavy duty EC-CUTTER is designed to trim all sizes of polymer conduit with ease. Heat treated steel cutting blade. 8.5" (216mm) long.

Use the EC-DB ratcheting Countersink Tool for countersinking the ends of polymer conduit (required for proper installation).



WIRE DELIVERY CONFIGURATION EXAMPLES

SAMPLE WIRE DELIVERY KIT CONFIGURATIONS

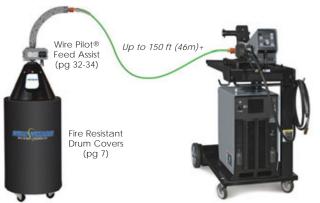
Don't know where to start with your wire delivery system? The following wire delivery kit configuration examples are designed to help you configure your wire delivery equipment setup for some typical weld cell layouts seen in robotic and semi-automatic arc welding. Based on wire type and size, they are designed to minimize wire skid friction for a smooth wire feed. These configurations are customizable and can be modified to fit your welding application. Refer to the wire-wizard.com website for additional wire delivery kit details and options. Contact your Wire Wizard® Technical Sales Manager or customer service for assistance with custom wire delivery systems for MIG as well as SAW welding.



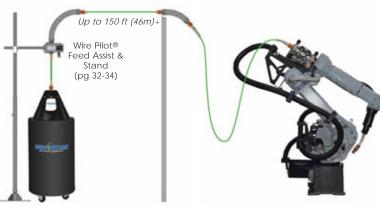
Steel Wire up to .052 (1.3mm) - Semi-automatic (Ref. #WDK-SDM-2)



Steel Wire up to .052 (1.3mm) - Robotic (Ref. #WDK-SDR-1)



Non-ferrous Wire up to 1/16" (1.6mm) - Semi-automatic, with Wire Feed Assist (Ref. #WDK-ADM-1P)



Non-ferrous Wire up to 1/16" (1.6mm) - Robotic, with Wire Feed Assist (Ref. #WDK-ADR-1P)



Cored or Stainless Steel Wire up to .052 (1.3mm) - Semi-automatic (Ref. #WDK-CDM-1)



Steel Wire on Wood Reel up to 1/16" (1.6mm) - Robotic (Ref. #WDK-SRR-1)

Wire delivery system may also be installed through the weld cell wall, underneath the wall or on a mezzanine above the cell. See pages 14-18 for additional Wire Wizard® Guide Module installation options.



The WeldCOP™ program is the core service offered by the Wire Wizard® Optimization Services division that includes weld cell auditing, maintenance and training. Upon completion of the program, an optimization plan is developed to establish welding performance standards that can be used for individual or multiple facilities performing the same welding processes. The ultimate goal of the WeldCOP™ program is to optimize the OEE (Overall Equipment Effectiveness) of all welding operations, resulting in substantial long-term cost savings and maximum productivity.





A FOUR STAGE PROCESS TO OPTIMIZE YOUR OEE

The **WeldCOP™** program consists of a four stage process to collect data, analyze and optimize the OEE for your welding application.

Stage 1: Review of the current (or new) welding process & incorporation of Weld CentralTM system to gather performance data.

Stage 2: Overview of the manufacturability opportunities based on the product, tooling and machine design.

Stage 3: Continuous OEE monitoring, identifying and implementing opportunities for improvement to optimize OEE.

Stage 4: Total process review & optimization plan focused on maximizing OEE and reducing costs.

ADDITIONAL SERVICES OFFERED BY THE WIRE WIZARD® OPTIMIZATION SERVICE DIVISION INCLUDE...



WELD CELL MAINTENANCE SERVICES

Wire Wizard® provides active weld cell maintenance services to keep welding operations consistent in quality and performance. Utilizing our maintenance team reduces downtime, labor costs and identifies potential problems before they shut down production. Services are provided by trained personnel familiar with welding and safety standards. Maintenance plans are tailored to the needs of each facility, and can include:

- ► Maintaining & monitoring welding consumables
- Maintenance of peripheral equipment
- ▶ Monitoring of weld cell performance & OEE
- ► Fast response to welding challenges
- ► Weld cell cleaning/dry ice blasting services



TRAINING COURSES & PROGRAMS

In order to maintain the standards developed through the WeldCOP™ program, it's critical that plant personnel are properly trained to understand and implement optimum welding procedures. Basic, intermediate and advanced training programs are available from our team of experienced welding professionals. Training courses and programs are available for:

- ► Maintaining WeldCOPTM OEE performance standards
- ▶ Basic and advanced processes & applications
- Setup & maintenance of peripheral equipment
- Welding safety training
- Weld cell troubleshooting

Contact sales or customer service at 517-782-8040 for more information on WeldCOP™ and other weld cell services.

CO2MMANDO AP



ALL PNEUMATIC DRY ICE BLASTER



Welding Fixture - Before & After

Blasting Gun & Nozzles

Many additional Nozzles/Extensions available

NU-ICE AGE DRY ICE CLEANING EQUIPMENT

ELCo Enterprises offers the Nu-lce Age line of dry ice blasting equipment, excellent for weld cell cleaning and other plant maintenance applications. Dry ice blasting is a process where dry ice (solid CO2) pellets are accelerated in a pressurized air stream to clean or prepare a surface. Through sublimation, where CO2 instantly changes from a solid to a gas, the pellets create mini-explosions upon impact to effectively clean nearly any surface. Dry ice blasting is the ideal cleaning method for weld cells and other areas of the plant, including tooling, exhaust and ventilation systems. The key advantages of dry ice blasting are that it leaves behind no secondary waste (CO2 evaporates) and most equipment and machinery can be cleaned in place without any disassembly or cooling, reducing downtime for maintenance.

Dry Ice Blasting Benefits

- Environmentally friendly no chemicals or harmful vapors!
- Non-abrasive, nonflammable and nonconductive
- Does not generate any secondary waste
- Most equipment can be cleaned in place without any disassembly or cooling, reducing downtime
- Removes residue, spatter, slag, grease, oils and more



CO₂MMANDO 55 DRY ICE BLASTER

Dry Ice Blasting Machine Features

- Easy to use with minimal training required
- Compact size and wheels make this machine easy to transport and maneuver while cleaning
- Adjustable blast pressure and pellet feed rate
- Static ground cable included to reduce the risk of static electric shock in certain blasting applications
- ► Each Dry Ice Blasting Machine includes required hoses, blast gun, extension and a short round & fan nozzle (see below).

For more information and cleaning demonstration videos, visit www.nuiceage.com



ALPHA-NUMERIC INDEX

Alpha-Numeric Parts Index	Page	A-10C-H-SR	EAS1000-DW
1J-351-01		A-10C-H-SRL	EAS1000-FS
2U01008		A-10C-X	EAS1000-HDC1
2U31013		A-10C-X-SR	EAS1000-HDC5
2U32013		A-10C-X-SRL	EAS1000-HDC32
5GMK		A-10HM	EAS1000-RI
5454K87		A-10HP	EC-3-R
40021-04		A-10R	EC-4-R
A-1A-4.5		A-10RP	EC-6
A-1A-B.		A-10R-SR	EC-CUTTER
A-1A-C	29	A-10SFE	EC-DB
A-1A-D	29	A-10XFE	EC-TCD
A-1AH330		A-10XP	EL-10
A-1AK		A-11E-1A	EL-20
A-1A-XR		A-11E-1B	EL-30
A-1B-C2		A-11X	EL-50
A-1CL	29	A-11XH	EL-NCS-13MM 41
A-1C-S-12		A-11XH-LW	EL-NCS-15MM 41
A-1E		A-12A	EL-NCS-15MM-A 41
A-1E-A		A-14	EL-NCS-50-M
A-1FRO		A-14B	EL-NCS-500
A-11 KO-B		A-14CM	EL-NCS-500-A
A-1LN		A-14KIT	EL-NCS-625-A
A-1LN-23A		A-1527	EL-NCS-625-M
A-1LN-23B	29	A-15-1	EL-NCS-750 41
A-1LN-A		A-16F-3	EL-NCS-AC-16
A-1LN-EK		A-16F-4	EL-NCS-ACD-14
A-1LN-K A-1LN-K-LW		A-16F-5	EL-NCS-ACD-DN
A-1LN-LW		A-16M-P1	EL-NCS-AD-14
A-1LN-S-5/32		A-16M-P2	EL-NCS-CC5-20-3
A-1LN-S-12		A-16M-ST	EL-NCS-CC7-20-3 41
A-1M		A-17	EL-NCS-CC9-20-3 41
A-1MOT-AU		A-18	EL-NCS-EC
A-1MOT-HP		A-19	EL-NCSP
A-1NA-5 A-1OTC		A-20	EL-NCSP-A
A-10TC-FX		A-23	EL-NCS-STAND 41
A-1PA		BW-WP	EL-NCS-TB
A-1QD-5/32		C-12-12	EL-NCS-TB-5 41
A-1QD-12		C-2811	EL-NCS-TCP
A-1SKS		C-28-LINER	EL-NCS-TL-13MMF
A-2E A-2FRO		C-34	EL-NCS-TL-50
A-2LN		C-34P	EL-NCS-TL-62
A-2LN-10S	28	C-34P-LINER	EL-NCS-TL-62F
A-2LN-AK	28	C-35	EL-NCS-TML-50 41
A-2LN-AK-QD		C-35-LINER	EL-NCS-TML-62 41
A-2LNIC-AK		C-35P	EL-NCS-TS-13MM
A-2LNIC-AK-QD		C-36	EL-NCS-TS-13MMF
A-2PA-QD		C-36-NS	EL-NCS-TS-50F
A-2SKS		C-3711	EL-NCS-TS-62
A-3		C-40	EL-NCS-TS-62F 41
A-3HD		C-41	EL-NCS-WCS-12 41
A-3QDF-1		CHH-10	EL-NCS-WCS-LW
A-3QDF-2		CHH-16	EL-NCS-WCS-SA
A-3QDF-4		CM-F-1	FC-E
A-3QDF-5		CM-F-2	FC-X
A-3QDF-6	30	CM-F-3	FC-XH
A-4		CM-F-3-MH	FC-XH-LW
A-4HD		DLG7	FC-X-SW
A-4-I		DMK	FDD-26-12
A-4L-H		EAS1000-BC1	FDD-MD-LD
A-4-ST		EAS1000-BC5	FDL
A-4-ST-I		EAS1000-BC32	FDL-21-12
A-5	27	EAS1000-BCT	FDL-24-12 47
A-6		EAS1000-C	FDL-C
A-6HD		EAS1000-C1	FDL-FA
A-7 A-9		EAS1000-C5	FDL-HS
A-9-FE		EAS1000-C32	FDL-OSL-MD-K
A-10CFE		EAS1000-CT	FDL-OSL-SD-K 48
A-10C-H	22	EAS1000-DP	FDSC

ALPHA-NUMERIC INDEX

GC-1	PFA-WT-DS	WGM-LW-ECK-38
GC-2	PFA-WT-IK	WGM-LW-ECK-50
GC-CRIMPER	PFA-WWTT32	WGM-M-1
GFJ-145	PFA-WWTT-B	WGM-MSK
GFJ-1A	PFA-WWTT-B1	WGM-NSW-SW 8
GFJ-1B	PFA-WWTT-B2	WGM-PFA-STAND
GFJ-1D	RCH-3-7-SH	WGM-PFA-STAND-4
GFJ-2	RCH-4-6	WGM-PFA-STAND-ARM
GFJ-2A	RCH-5-10-SH	WGM-PFA-SW-15
GFJ-2B	RCH-5-13	WGM-SMB-315
GFJ-2D	RCH-8-12-SH	WGM-STAND-SW
GFJ-3	RCH-10-15-SH 25	WGM-UA 15
GFJ-3A	RCH-11-19 25	WGM-UAK15
GFJ-3B	RCH-16-23-SH 25	WGM-WK-1-1
GFJ-3D	RCH-22-27-SH	WGM-WK-1-3
GFJ-ADJ-A	RCH-H	WGM-WK-2-1
GFJ-ADJ-B	RCH-S	WP100034
GFJ-ADJ-C	RCH-SH	WRSC
GFJ-F1	RW1028-C3611	WSL-100
GFJ-F2	RW1028-C3711	WSL-100-IK
GFJ-F3	RW1034-C3611	WSM-100
HHSS49	RW1034-C3711	WSM-100-IK
HHSS-12 49	RW1034P-C36	WSS-100
KCS-2-12	RW1034P-C37	WSS-100-A
KCS-2-24	RW1035-C3611	WSS-100-IK
KCS-2-36	RW1035-C36NS	WW10204F 5
		WW10204F
KCS-2-48	RW1035-C3711	
	RW1035P-C36	WW10231F 5
KCS-4-24	RW1035P-C36NS	WW10231F-DP5
KCS-4-36	RW1035P-C37	WW10260C-2 5
KCS-4-48	RW1039-C4012	WW10260DP-2 5
LJ-007	RW1039-C4112	WW10260F 5
NSW-20.4-2 8	RWC1111-3012	WW10260F-DP5
NSW-20.4-4 8	RWC1111-30S 12	WWA5-E35 5
NSW-BCF 8	TS-H-12 37	WWA-12-1
NSW-BW-220EU-R138	U-005	WWA-12-2
NSW-BW-220-R13 8	WC-1-CB43	WWB-C-12-1
NSW-BW-DS-220EU-R13 8	WC-1-CS 43	WWB-C-15-1
NSW-BW-DS-220-R13 8	WC-1-GM 44	WWB-P-12-1
NSW-BW-DS-R13 8	WC-1-GM-P 44	WWB-P-15-1
NSW-BW-R13 8	WC-1-KIT	WWDC-20.4-R 7
NSW-BW-WD 8	WC-1-VA 43	WWDC-20.5-OC 7
NSW-BW-WS-1 8	WC-1-WS 43	WWDC-21-S
NSW-BW-WS-035 8	WC-1-WS-I/O 43	WWDC-23.4-R 7
NSW-BW-WS-045 8	WGB 8	WWDC-23.5-OC 7
NSW-BW-WS-052 8	WGM-1	WWDC-24-S 7
NSW-BW-WS-062 8	WGM-1-90-BRKT	WWDC-26-R
NSW-BW-WS-078 8	WGM-1-BRKT	WWDI 4
NSW-OC23.5-2 8	WGM-1-S 15	WWDO-23.5 5
NSW-OC23.5-4 8	WGM-2-BRKT	WWDP4
NSW-PFA-AK-159	WGM-3-BRKT	WWDP-WT
NSW-SC24-2 8	WGM-4-BRKT	WWIC-114
NSW-SC24-4 8	WGM-021	WWOA-20 4
NSW-WM 8	WGM-024	WWOA-20H5
PAWFS-12	WGM-025	WWOC 5
PFA-34	WGM-044	WWOC-20.5 5
PFA-35-15	WGM-049	WWOC20.5-DP5
PFA-DA	WGM-A5	WWOC-23.5 5
PFA-DM	WGM-A-10BK	WWOC23.5-DP5
PFA-DR-1-8	WGM-A-10BK	WWOC-DP 5
PFA-DR-1-6	WGM-C-1	WWPT49
PFA-DR-3/16	WGM-CM-1	WWRL-H34
PFA-DR-3-32	WGM-DK	WWRL-H44
PFA-DR-5/32	WGM-DR	WWSB-M124
PFA-DR-5/32	WGM-EA-10	WWSC-21 5
PFA-DR-035	WGM-EA-20	WWSC21-DP5
		WWSC-24 5
PFA-DR-052	WGM-F-2-5	WWSC24-DP5
PFA-LM	WGM-F-2-10	WWSC-29
PFA-LM-15	WGM-F-2-ECK-A	WWSD
PFA-QD-LW	WGM-F-2-ECK-B	WWTT-23.4-DH-19
PFA-RK	WGM-F-2-M	WWTT-2012
PFA-SK	WGM-FLM	WWTT-BRAKE-1-12
PFA-WM	WGM-FSK	WWTT-BRK-12
PFA-WM-EA	WGM-HSK	WWTT-COVER-13
PFA-WT	WGM-IK	WWTT-DB-13
PFA-WT-32	WGM-LBM-BRKT	WWTT-LW-12
PFA-WT-DA	WGM-LW-1	WWTT-RL
PFA-WT-DC	WGM-LW-BRKT	WWTT-WHEEL-12

ELCo Enterprises, Inc. offers UPS shipping from our regional distribution centers, including:

- Ground (see maps)
- Next Day Air
- 2nd Day Air
- 3 Day Select
- International Service

SHIPPING TRANSIT TIMES FOR UPS GROUND:

□1 DAY □2 DAYS □3 DAYS ■4 DAYS □5 DAYS

Orders may also be available for pick up from our Distribution Center locations.



Jackson, MI Headquarters 5750 Marathon Drive Jackson, MI 49201



Tanner, AL Training & Tech Center
Alabama Robotics Technology Park
6629 US Hwy 31, Ph. II Ste. C • Tanner, AL 35671



Houston, TX Distribution Center 8811 C Wallisville Rd. Houston, TX 77029

Also provides fast shipping to Mexico (transit times will vary)

CANADA ORDERS SHIP FROM OUR DISTRIBUTION CENTER LOCATED IN WINDSOR, ONTARIO.

TERMS AND CONDITIONS

"We," "us," and "our" refer to ELCo Enterprises, Inc.

ORDERING: Our sales and customer service representatives are available Monday-Friday, 8:00_{AM}-5:00_{PM} (EST) at our main office by calling 517-782-8040. Any orders placed after 3:00_{PM} for same day shipping will be charged a \$50.00 expedite fee. We can also be reached by fax 24 hours a day, seven days a week. When ordering, please state your company's "bill to" and "ship to" address, purchase order number, part number, quantity, item description, and any special shipping instructions. All purchases will be shipped UPS ground unless otherwise specified. Items too large for UPS, will be shipped by commercial carrier.

\$50 minimum order.

NOTE: Purchases cannot be delivered to post office boxes.

SPECIAL ORDERS: If a specialized part is required, please consult our staff for a quote. There are no returns on special order items.

TERMS: All orders placed on account are net 30 days. Unpaid balances are subject to a 1.5% per month late charge. COD orders are accepted if payment is in the form of a company check, certified check, or money order.

RETURNS: All returns must be in new condition and authorized by ELCo by use of a Returned Merchandise Authorization Number (RMA) within 30 days of the purchase date. Returns are subject to a 20% restocking fee.

WARRANTY: ELCo Enterprises, Inc. warrants manufactured products to be free from defects in material and workmanship during normal use and proper maintenance for a period of 12 months after delivery of purchase. During the warranty period, any product found by us to be defective will be repaired or replaced. Improperly maintained or installed equipment is not covered under warranty. ELCo disclaims liability for any incidental or consequential damages.

DISCLAIMER: Every effort has been made to avoid any printing errors in this catalog. Consequently, we do not claim responsibility for any application or specification errors. Wire Wizard® products are intended for use with other Wire Wizard® products. Use with any other manufacturer's products may void the warranty. Any reproduction of artwork, photographs, or any other portion of this catalog without prior written consent of ELCo Enterprises, Inc. is a violation of our copyright. Violators will be prosecuted.



5750 MARATHON DRIVE • JACKSON, MI 49201 USA PHONE: 517-782-8040 • FAX: 517-782-8039 TOLL-FREE: 866-584-7281 • www.wire-wizard.com











Wire Wizard® Wire Dispensing Equipment
PowerBall® & E-Power® Torch Products
Low Friction Conduits & Connectors
Wire Wizard® Guide Module System
WizardGear™ Cable Management
Blue Magic® & Blue Chill® Anti-spatter
Torch Wizard® Cleaning Stations
Weld Central® Optimization System
Drum & Reel Handling Equipment

SCAN HERE FOR THE LATEST DIGITAL ELCO CATALOG

or go to www.wire-wizard.com/ELCoCatalog_web.pdf











