

FLEXTEC MULTI-PROCESS WELDERS

FLEXTEC 350X, 500, 500P, 650X



LINCOLN
ELECTRIC

It Doesn't Get Much Simpler

Than FLEXTEC®.

Out on the construction jobsite or in most fabrication shops, it pays to keep it simple. The Flextec platform is designed for that kind of environment. These multi-process welders are easy to setup and easy to operate, yet rugged and flexible enough to be used in construction, fabrication, shipbuilding and other heavy-duty applications.



FLEXTEC FAMILY OVERVIEW

Machine	Input (V)	Output (A)		SMAW	GTAW	GMAW	Pulse	FCAW-G	FCAW-S	SAW	Gouging carbon diameter in. (mm)
		100%	60%								
Flextec 350X Construction	380-575 3 Phase	300	350	•	•	•		•	•		1/4 [6.4]
Flextec 350X Standard	380-575 3 Phase	300	350	•	•	•		•	•		1/4 [6.4]
Flextec 500	380-575 3 Phase	450	500	•	•	•		•	•		3/8 [9.6]
Flextec 500P	380-575 3 Phase	450	500	•	•	•	•	•	•		3/8 [9.6]
Flextec 650X	380-575 3 Phase	650	750	•	•	•		•	•	•	1/2 [12.7]

Simple

- Streamlined operator panel minimizes setup time

Reliable

- Built on industry-proven design elements
- Engineered for outdoor use and harsh environments (IP23 rated)

Flexible

- Compatible with portable feeders and bench or boom feeders of all types.
- Choice of models to fit any application and budget

Processes »

Stick, DC TIG, MIG, Flux-Cored, Arc Gouging

Applications »

Fabrication, Production, Education, Shipbuilding, Construction

Output »



Input »



Product Number »

Flextec 350X:

- K4271-1 350X Construction Model
- K4272-1 350X Standard Model

Flextec 500:

- K4091-1 Base Model

Flextec 500P:

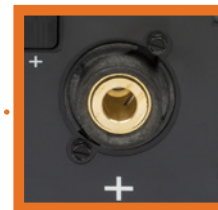
- K4092-1 Base Model

Flextec 650X:

- K3425-1 Base Model

FLEXIBILITY

Flextec Power sources support multiple weld processes: MIG, TIG, Stick, Gouging, FCAW, SAW
Flextec can be used with nearly all Lincoln Electric wire feeders. Due to available feeder communication connections.



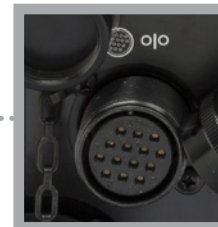
CrossLinc® (Lincoln Electric LN-25X model)

CrossLinc Technology communicates through a standard weld cable to enable voltage or current control at the arc without a control cable.



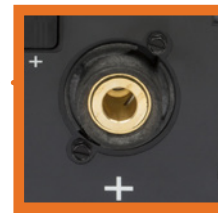
5-pin Control Cable Connection (Lincoln Electric Power Feed® models)

5-pin high-speed digital communication enables advanced process capability and additional operator controls. Allows compatibility with future wire feeder models.



14-pin (Lincoln Electric LF, LN and Flex Feed® models)

14-pin analog communication enables compatibility with most existing Lincoln wire feeders.



Across-the-arc Connection (Lincoln Electric LN-25 PRO / Activ8® models)

Across-the-arc feeders connect to the power source using the weld cables. This basic configuration does not use a control cable or CrossLinc Technology, so voltage control is only accessed at the welding power source.

FLEXTEC/WIRE FEEDER SYSTEM FEATURES BY CONNECTION TYPE

• Standard • Specific Models Only

Feeder Connection Type	Features						
	WFS Control	Voltage Control	Memories	Limits/ Lockouts	Advanced U/I Controls ⁽¹⁾	Synergic Modes ⁽²⁾	Pulsing Capability
5-pin Digital (ArcLink)	•	•	•	•	•	•	•
14-pin Analog	•	•	•	•	•		
CrossLinc	•	•					
Across-the-arc	•						

(1) Advanced controls include pre-flow, post-flow, run-in, starting parameters, crater fill, burn back, spot timer and electronic trigger lock.

(2) Synergic Modes enable easy setup with one-knob output control for the system.

AVAILABLE CONNECTION TYPES BY MACHINE AND FEEDER MODEL

Model	Feeder Connection Type			
	Voltage Sensing/Across-the-arc	14-pin Analog	5-pin Digital	CrossLinc

MACHINES

Flextec 350X Construction	•			•
Flextec 350X Standard	•	•	•	•
Flextec 500	•	•	•	
Flextec 500P	•	•	•	
Flextec 650X	•	•	•	•

WIRE FEEDERS

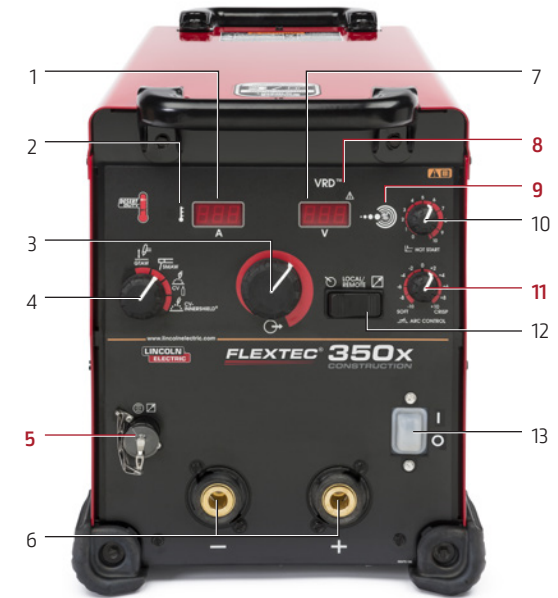
LN-25X	•			•
Activ8®, LN-25, LN-25 PRO, LN-25 Pipe	•			
LN-25 Pro Dual	•	•		
LF-72 and LF-74		•		
Flex Feed 74HT		•		
Flex Feed 84		•		
Power Feed Family			•	
MAXsa® 10 ⁽⁵⁾ , 19 (Flextec 650X only)			•	
LT-7 (Flextec 650X only)		•		

(5) MAXsa 10 K2814-4 or newer.

Select machine and feeder that have the same connection type

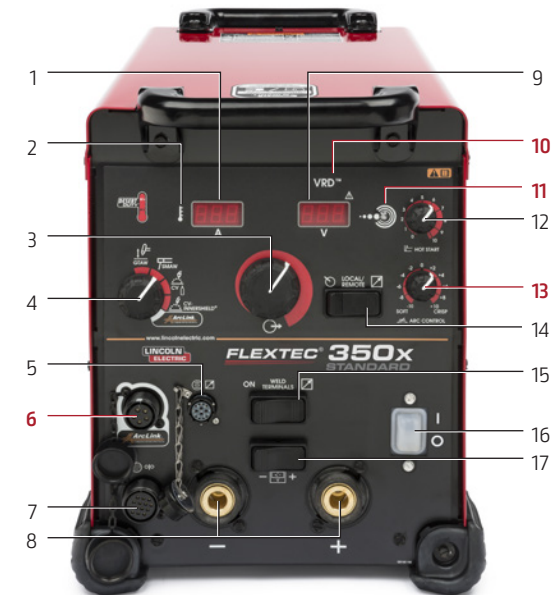
FLEXTEC 350X Construction Controls »

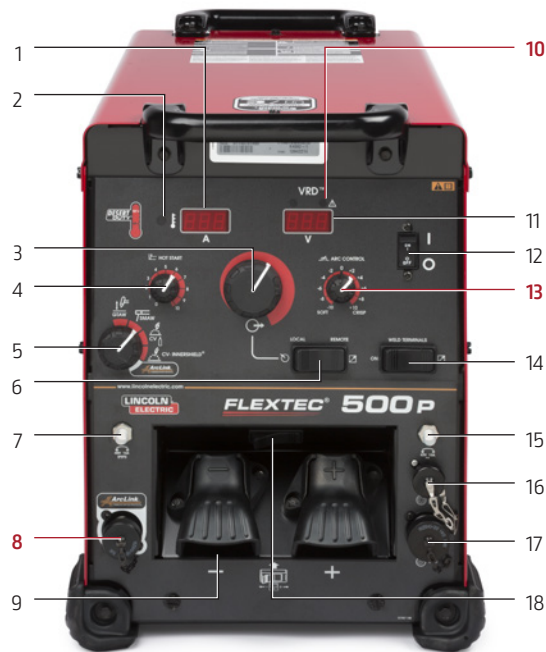
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|--|---|
| 1. Amperage Display | 8. VRD™ (Voltage Reduction Device) Indicator Lights |
| 2. Thermal LED | |
| 3. Output Control Dial | 9. CrossLinc Indicator Light |
| 4. Weld Process Selector Switch | 10. Hot Start Control Dial |
| 5. Remote Output Control (12-pin Universal Connector) | 11. Arc Force Control Dial |
| 6. Positive and Negative Welding Output Studs (Tweco®-style) | 12. Local/Remote Selector Toggle Switch |
| 7. Voltage Display | 13. Power Switch |



FLEXTEC 350X Standard Controls »

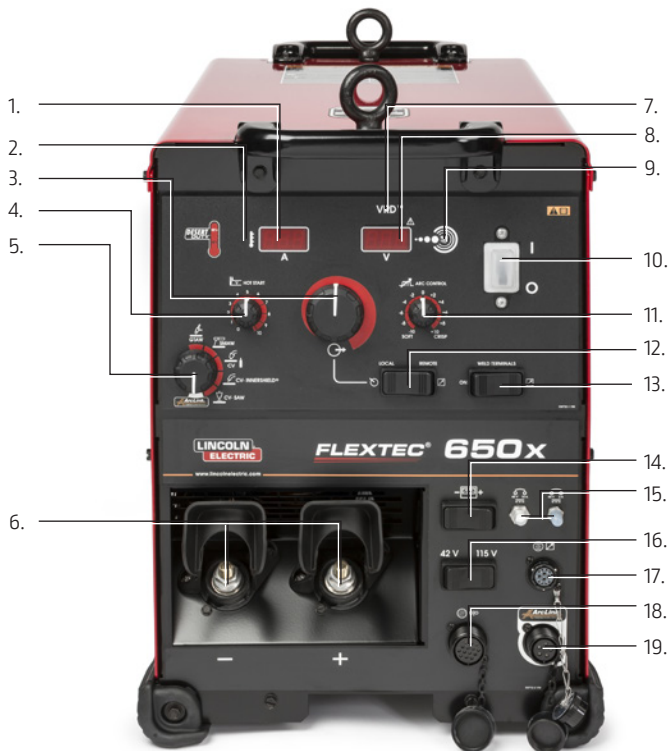
- | | |
|---|---|
| 1. Amperage Display | 10. VRD (Voltage Reduction Device) Indicator Lights |
| 2. Thermal LED | |
| 3. Output Control Dial | 11. CrossLinc™ Indicator Light |
| 4. Weld Process Selector Switch | 12. Hot Start Control Dial |
| 5. Remote Output Control (12-pin Universal Connector) | 13. Arc Force Control Dial |
| 6. 5-pin ArcLink® Wire Feeder Connector | 14. Local/Remote Selector Toggle Switch |
| 7. 14-pin Wire Feeder Connector | 15. Weld Terminals On/Remote Selector Switch |
| 8. Positive and Negative Welding Output Studs (Tweco-style) | 16. Power Switch |
| 9. Voltage Display | 17. Wire Feeder Voltmeter Polarity Selection Switch |





FLEXTEC 500/500P Controls »

1. Amperage Display Meter
2. Thermal LED
3. Output Control Dial
4. Hot Start Control Dial
5. Weld Process Selector Switch
6. Local/Remote Selector Toggle Switch
7. Circuit Breaker Reset Button for the 5-pin Wire Feeder Connector
8. **5-pin ArcLink Wire Feeder Connector**
9. Positive and Negative 1/2 in. (12.7 mm) Welding Output Studs
10. VRD (Voltage Reduction Device) Indicator Lights
11. Voltage Display Meter
12. Power Switch
13. Arc Force Control Dial
14. Weld Terminals On/Remote Selector Switch
15. Circuit Breaker Reset Button for the 14-pin Wire Feeder Connector
16. Remote Output Control (12-pin Universal Connector)
17. **14-pin Wire Feeder Connector**
18. Wire Feeder Voltmeter Polarity Selection Switch



FLEXTEC 650X Controls »

1. Amperage Display Meter
2. Thermal LED
3. Output Control Dial
4. Hot Start Control Dial
5. Weld Process Selector Switch
6. Positive and Negative Welding Output Studs
7. VRD (Voltage Reduction Device) Indicator Light
8. Voltage Display Meter
9. **CrossLinc Indicator Light**
10. Power Switch
11. Arc Force Control Dial
12. Local/Remote Selector Toggle Switch
13. Weld Terminals On/Remote Selector Switch
14. Wire Feeder Voltmeter Polarity Selection Switch
15. Circuit Breaker Reset Buttons for 42V feeders and ArcLink peripherals
16. 42V or 115V Wire Feeder Selector Switch
17. **Remote Output Control 12-pin Universal Connector**
18. 14-pin Wire Feeder Connector
19. **5-pin ArcLink Connector**

SPECIFICATIONS

MACHINES	Product Number	Input Power	Rated Output Current/Voltage/ Duty Cycle	Input Current @ Rated Output	Output Range	H x W x D in (mm)	Net Weight lb (kg)
FLEXTEC 350X Construction (Tweco®)	K4271-1	380/460/575/3/50/60	350A/34V/60% 300A/32V/100%	26/23/18	5-425A Max OCV 80V DC	17 x 13 x 23 (477 x 356 x 673)	77 (35)
FLEXTEC 350X Construction (Dinse®)	K3441-1						
FLEXTEC 350X Standard (Tweco)	K4272-1						82 (37)
FLEXTEC 350X Standard (Dinse)	K3442-1						
FLEXTEC 500	K4091-1	380/460/575/3/50/60	500A/40V/60% 450A/38V/100%	39/31/31 33/27/27	5-500A	18.8 x 14 x 26.5 (477 x 356 x 673)	120 (54)
FLEXTEC 500P	K4092-1	380/460/575/3/50/60	500A/40V/60% 450A/38V/100%	39/31/31 33/27/27	5-500A	18.8 x 14 x 26.5 (477 x 356 x 673)	120 (54)
FLEXTEC 650X	K3425-1	380/460/575/3/50/60	750A/44V/60% 650A/44V/100%	61/50/40 57/47/38	10-815A	21.8 x 16.1 x 29.3 (554 x 409 x 584)	165 (75)

Rack systems in several configurations are available for the Flextec 350X, 500 and 650X models. More details are available in Bulletin E5.92

Flextec Racks



K3402-1, Flextec® 350X Construction 4-Pack Rack
K3403-1, Flextec® 350X Standard 4-Pack Rack



[Expandable to 8-Pack rack with K3410-1, Flextec® 350X 4-Pack to 8-Pack Rack Conversion Kit



K4098-1, Flextec 500 4-Pack Rack
K3510-1, Flextec 650X 4-Pack Rack



K4099-1, Flextec 500 6-Pack Rack

PACKAGES – WHAT'S INCLUDED

Description	Product Number	FLEXTEC 350X PACKAGES		
		LN-25X One-Pak K4278-1	LF-72 Heavy Duty One-Pak K3438-1	Flex Feed 84 Heavy Duty One-Pak K3439-1
Flextec 350X Construction Model	K4271-1	•		
Flextec 350X Standard Model	K4272-1		•	•
Input power cord 8.5 ft (2.6 m)	–	•	•	•
LN-25X	K4267-1	•		
LF-72 Bench Model, Heavy Duty Wire Reel Stand	K2327-7		•	
Flex Feed 84 Single Bench Model, Heavy Duty Wire Reel Stand	K5000-2			•
2 Roll Drive and Wire Guide Kit 0.045 (1.1 mm) Cored	KP1697-045C	•		
4 Roll Drive and Wire Guide Kit 0.040-0.045 (1.0-1.1 mm) Solid Wire	KP1505-045S			•
2 Roll Drive and Wire Guide Combination Kit 0.035-0.045 (0.9-1.1 mm) Solid Wire	KP1696-1		•	
Magnum® PRO Curve™ 300 Gun and Cable Ready-Pak - 15 ft (4.5 m)	K2951-2-10-45	•	•	•
Tweco Connector Cable Package – includes 10 ft (3 m) work cable with clamp and 10 ft (3 m) electrode cable	K1803-2		•	•
Harris® Flowmeter Regulator and Hose	3100211		•	•

Description	Product Number	FLEXTEC 500 PACKAGES				
		Flex Feed 74HT Ready-Pak K4093-1	LF-72 Heavy Duty Ready-Pak K4094-1	LF-74 Heavy Duty Ready-Pak K4095-1	LF-72 Standard Duty One-Pak K4096-1	Flex Feed 84 Heavy Duty One-Pak K3440-1
Flextec 500 Model	K4091-1	•	•	•	•	•
Flex Feed 74HT, High Torque for larger wire diameters	K3883-13	•				
LF-72 Bench Model, Heavy Duty Wire Reel Stand	K2327-7		•			
LF-72 Bench Model, Standard Duty Wire Reel Stand	K2327-5				•	
LF-74 Bench Model, Heavy Duty Wire Reel Stand	K2426-5			•		
Flex Feed 84 Single Bench Model, Heavy Duty Wire Reel Stand	K5000-2					•
3/0 Welding Cable (10 ft lug to lug)	K1842-10	•	•	•	•	•
Work Lead Package – 15 ft (4.5 m) cable with GC500 ground clamp	K2149-1	•	•	•	•	•
Harris Flowmeter Regulator and Hose	3100211	•	•	•	•	•
Inverter and Wire Feeder Cart	K3059-4	•	•	•		
4 Roll Drive and Wire Guide Kit 0.040-0.045 (1.0-1.1 mm) Solid Wire	KP1505-045S					•
2 Roll Drive and Wire Guide Combination Kit 0.035-0.045 (0.9-1.1 mm) Solid Wire	KP1696-1		•		•	
4 Roll Drive and Wire Guide Combination Kit 0.035-0.045 (0.9-1.1 mm) Solid Wire	N/A			•		
Inverter Cart Mounting Bracket Kit – Secures feeder to K3059-4/-5 inverter cart. Compatible with FlexFeed and Power Feed wire feeders.	K4068-1	•				
Flextec 500 / 500P Locking Foot Kit – secures Flextec 500/500P to the Inverter Cart, rack and accessories	K3056-2	•	•	•		
Magnum PRO Curve™ 400 Gun and Cable Ready-Pak - 15 ft (4.5 m) See Bulletin E12.05	K2952-2-10-45	•	•	•		•

PACKAGES – WHAT'S INCLUDED

Description	Product Number	FLEXTEC 500P PACKAGES	
		Power Feed 84 Heavy Duty Ready-Pak K4097-1	Flextec 500P w/ CE Filter Kit One-Pak K4091-3
Flextec 500P Model	K4092-1	•	•
Power Feed 84, Heavy Duty Wire Reel Stand, U/I, USB	K3328-13	•	
3/0 Welding Cable (10 ft lug to lug)	K1842-10	•	
Work Lead Package (15ft) includes GC500 ground clamp	K2149-1	•	
Harris Flowmeter Regulator and Hose	3100211	•	
Inverter and Wire Feeder Cart	K3059-4	•	
Inverter Cart Mounting Bracket Kit – Secures wire feeder to K3059-4/-5 inverter cart. Compatible with Flex Feed and Power Feed wire feeders.	K4068-1	•	
Flextec 500 / 500P Locking Foot Kit – Secures Flextec 500/500P to the Inverter Cart, rack and accessories	K3056-2	•	
Magnum PRO Curve 400 Gun and Cable Ready-Pak - 15 ft (4.5 m). See Bulletin E12.05	K2952-2-10-45	•	
Flextec 500 CE Filter Kit	K3129-2		•

Description	Product Number	FLEXTEC 650X PACKAGES				
		LF-72 Heavy Duty Ready-Pak K3511-1	LF-74 Heavy Duty Ready-Pak K3512-1	LF-74 Heavy Duty One-Pak K3513-1	Flex Feed 84 Heavy Duty One-Pak K3514-1	CE Filter One-Pak K3515-1
Flextec 650X Model	K3425-1	•	•	•	•	•
LF-72 Bench Model, Heavy Duty Wire Reel Stand (Includes 0.035/0.045 in. [0.9/1.2 mm]reversible drive rolls)	K2327-7	•				
LF-74 Bench Model, Heavy Duty Wire Reel Stand (Includes 0.035/0.045 in. [0.9/1.2 mm]reversible drive rolls)	K2426-5		•	•		
Flex Feed 84 Single Bench Model, Heavy Duty Wire Reel Stand	K5000-2				•	
3/0 Welding Cable (10 ft lug to lug)	K1842-10	•	•	•	•	
4/0 Work Lead Package (15ft) includes GC500 ground clamp	K2149-1	•	•	•	•	
Harris Flowmeter Regulator and Hose	3100211	•	•	•	•	
Inverter and Wire Feeder Cart	K3059-4	•	•			
4 Roll Drive and Wire Guide Kit 1/16 in. (1.6 mm) Cored	KP1505-1/16C		•	•	•	
2 Roll Drive and Guide tube Kit 0.045 in. (1.2 mm) Solid Wire	KP1696-045S	•				
2 Roll Drive and Wire Guide Combination Kit 0.035-0.045 [0.9-1.1 mm] Solid Wire	KP1696-1	•				
4 Roll Drive and Wire Guide Combination Kit 0.035-0.045 [0.9-1.1 mm] Solid Wire	N/A		•	•		
Magnum PRO Curve 400 Gun and Cable Ready-Pak - 15 ft (4.5 m). See Bulletin E12.05	K2952-2-10-45	•				
Magnum PRO Curve 400 Gun and Cable 15 ft (4.5 m)	K2952-2		•	•	•	
Gun Connector Kit	K466-10		•	•	•	
Liner 0.052-1/16 in. (1.3-1.6 mm) dia. 15 ft (4.6 m) length	KP44-116-15		•	•	•	
Flextec 650X CE Filter	K3129-1					•

ACCESSORIES

	Product Number	350X	350X	500	500P	650X
		Standard Model	Construction Model	Base Model	Base Model	Base Model
		K4272-1	K4271-1	K4091-1	K4092-1	K3425-1
• Compatible						
GENERAL						
CrossLinc Remote – Adjust voltage or current at the arc. For CrossLinc-equipped welders. See publication MC16-137	K4345-1	•	•			•
Multi-Process Switch – Easily change welding process and polarity without changing cables at the machine	K3091-1	•	•	•	•	•
12-pin to 6-pin Adapter – Allows 6-pin remote controls (K870, K963-3, K857, K4217-1) to be used with 12-pin Universal Connection	K2909-1	•	•	•	•	•
Wireless Foot Pedal with 6-pin Amphenol® – Permits remote adjustment of output ⁽¹⁾	K4217-1	•	•	•	•	•
Remote Output Control with 12-pin Universal Connector (25 feet) – Permits remote adjustment of output	K857-2	•	•	•	•	•
Remote Output Control with 6-pin Amphenol Connector (100 feet) – Permits remote adjustment of output ⁽¹⁾	K857-1	•	•	•	•	•
Foot Amptrol with 12-pin Amphenol connector (25 ft) – Remote current control for TIG welding	K870-2	•	•	•	•	
Hand Amptrol Rotary Track Style, 12-pin Amphenol (25 ft) – Remote current control for TIG welding ⁽¹⁾	K963-4	•	•	•	•	•
Flextec 350X CE Filter Kit (380-575 Vac)	K4420-1	•	•			
Flextec 500/500P CE Filter Kit (380-575 Vac)	K3129-2			•	•	
Flextec 650X CE Filter Kit (380-575 Vac)	K3129-1					•
3/0 Welding Cable – Lug to Lug, 3/0, 600A, 60% duty cycle, 10 ft.	K1842-10			•	•	•
4/0 Work Lead Package – Lug to Lug, 4/0 cable with GC500 work clamp. 15 ft. (4.6 m) length	K2149-1			•	•	•
Harris® Model 355 Flowmeter Regulator and Hose – Includes 10 ft. (3.0 m) hose	3100211	•	•	•	•	•
Single Cylinder Inverter and Wire Feeder Cart – Requires K4068-1 mounting bracket for LF, Flex Feed and Power Feed Feeders. Requires locking foot kit for Flexsecs	K3059-4	•	•	•	•	•
Dual Cylinder Inverter and Wire Feeder Cart – Requires K4068-1 mounting bracket for LF, Flex Feed and Power Feed Feeders. Requires locking foot kit for Flexsecs	K3059-5	•	•	•	•	•
Inverter Cart Mounting Bracket Kit – Use for mounting Flex Feed or Power Feed (to the K3059-4 inverter cart)	K4068-1	•	•	•	•	•
Flextec 350 Locking Foot Kit – Allows the Flextec to lock to the inverter cart, Multi-Process Switch, Cool-Arc® 55 water cooler	K4424-1	•	•			
Flextec 500 / 500P Locking Foot Kit – Allows the Flextec to lock to the inverter cart, Multi-Process Switch, Cool-Arc 55 water cooler	K3056-2			•	•	
GFCI Kit – UL-approved 120V ground fault circuit interrupter replaces existing non-GFCI receptacle	K3157-1					•

(1) Requires the K2909-1 12-pin to 6-pin adapter if used with Flextec® 350X, 500, 500P.

		350X	350X	500	500P	650X
		Standard Model	Construction Model	Base Model	Base Model	Base Model
	Product Number	K4272-1	K4271-1	K4091-1	K4092-1	K3425-1
ACCESSORIES	• Compatible					
GENERAL						
LC-40 – Tweco-Style Plug (male, 1/0 Thru 2/0) 1/0 - 2/0 (50-70 mm ²)	K3416-70	•	•			
LC-40 – Tweco-Style Receptacle (female, 1/0 Thru 2/0) 1/0-2/0 (50-70 mm ²)	K3417-70	•	•			
LC-40HD – Tweco-Style Plug (male, 3/0 Thru 4/0) 2/0-4/0 (70-70-95 mm ²)	K3416-90	•	•			
LC-40HD – Tweco-Style Receptacle (female, 3/0 Thru 4/0) 2/0-4/0 (70-70-95 mm ²)	K3417-90	•	•			
Miller® Rack Adapter Kit – Allows Flextec 350X machines to be mounted in standard Miller Electric inverter racks. Requires the K4424-1 Flextec 350X Locking Foot Kit for each welder	K4421-1	•	•			
WIRE FEEDERS & GUNS						
LN-25X – Includes CrossLinc communication technology	K4267-1	•	•			•
LN-25 PRO Dual Power – Includes 14 pin connection	K2614-6	•	•	•	•	•
Flex Feed 74 HT – Four drive-roll, high-torque, industrial semiautomatic wire feeder for general/structural fabrication	K3883-13	•		•	•	•
Flex Feed 84 Single Bench – four drive roll feeder with heavy duty wire reel stand for general/structural fabrication	K5000-2	•		•	•	•
Flex Feed 84 Dual Bench – four drive roll feeder with heavy duty wire reel stand and contactor for general/structural fabrication	K5002-2	•		•	•	•
LF-72 Bench Model, Standard Duty Wire Reel Stand – Two drive roll feeder designed for MIG and cored wire welding in job shop and manufacturing environments	K2327-5	•		•	•	•
LF-72 Bench Model, Heavy Duty Wire Reel Stand – Two drive roll feeder designed for MIG and cored wire welding in job shop and manufacturing environments	K2327-7	•		•	•	•
LF-74 Bench Model, Heavy Duty Wire Reel Stand – Four drive roll feeder designed for MIG and cored wire welding in job shop and manufacturing environments	K2426-5	•		•	•	•
Power Feed 84, Heavy Duty Wire Reel Stand, U/I, USB – Four drive roll, digital ArcLink semiautomatic industrial wire feeder built on a modular platform to be used in a variety of applications	K3328-13	•		•	•	•
Magnum PRO Curve 300 Gun and Cable Ready-Pak - 15 ft (4.5 m) – For MIG or flux-cored welding. Includes Tweco-style back-end connector kit, liner, diffuser, nozzle, contact tip fully assembled	K2951-2-10-45	•	•			
Magnum PRO Curve 400 Gun and Cable Ready-Pak - 15 ft (4.5 m) – For MIG or flux-cored welding. Includes Tweco-style back-end connector kit, liner, diffuser, nozzle, contact tip fully assembled	K2952-2-10-45			•	•	•
Magnum PRO Guns and Accessories – See publication E12.05	–	•	•	•	•	•

* For additional feeders see www.lincoln/semi-autowirefeeder

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company* is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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