# FLEXTEC® 500X

Simple. Reliable. Flexible.



# Powerful Performance From the Ground Up

Out in the shipyards, construction sites and fabrication shops, it pays to keep it simple. The Flextec 500X multi-process welder is easy to set up and operate, yet rugged enough to stand up to heavy-duty indoor and outdoor applications.

Basic pulse MIG capability is standard on the Flextec 500X, including weld modes for cabon steel, stainless steel, aluminum and metalcore electrodes.

The Flextec 500X welder is also equipped with CrossLinc® technology giving you the flexibility to control the machine from hundreds of feet away without a control cable.

### Processes

SMAW, GTAW, GMAW, GMAW-P, FCAW, Arc Gouging

### **Applications**

Fabrication, Shipbuilding, Construction

### Input





# Output





**Product Number** K3607-2



# **Features**

# **Simple**

- Simple interface for ease of use.
- CrossLinc technology eliminates extra cables for simple system setup.1

### Reliable

- IP 23 rating means the Flextec 500X welder will excel in outdoor environments, such as construction sites and shipyards.
- Flextec 500X welder is Desert Duty® rated for operation in the harshest environments (up to 55C).
- Durable trayed and potted PC boards for electronics environmental protection

### **Flexible**

- Multi-process power source for all your welding needs.
- Compatible with all 42VAC wire feeders for MIG and Flux-Cored welding
- Arclink® enabled power source provides synergic pulse modes.2
- CrossLinc allows for remote control of CV and CC processes without extra cables.3
- Optimized stick welding for both cellulosic and low hydrogen electrodes.
- Touch-start Tig for easy, contamination free starts without high frequency.

# Crosslinc technology compatibility

- Full functionality without control cables
- Enables remote procedure setting at the feeder to improve weld quality
- Increases arc time with fewer trips to the power source to adjust settings
- Improves safety by reducing jobsite clutter
- (1) Only with CrossLinc enabled
- (2) Requires Power Feed® wire feeder.
- (3) Requires CrossLinc technology enabled wire feeder, or CrossLinc remote.

# **FLEXIBILITY**

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





CrossLinc technology (LN-25X, Activ8X, CrossLinc Remote)
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 wire feeder 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

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.

# **CROSSLINC TECHNOLOGY**



**CrossLinc w/True Voltage Technology (TVT)** – Improve all aspects of your operation with CrossLinc Technology and TVT.

### Safety

- Reduce jobsite clutter by removing cumbersome control cables.
- Eliminate unnecessary movement of personnel across the jobsite.
- No need to drag heavy control cables around the site.

# Crosslinc Technology Communicates Settings Directly Over The Weld Cables.

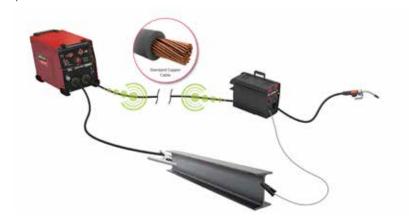
- · No additional control cable is needed.
- · Pre-set the desired voltage on the feeder.
- The feeder sends the signal to the CrossLinc enabled power source.
- The CrossLinc compatible power source puts out the desired voltage.
- The Activ8X recieves the voltage and lets you know the actual voltage at the arc.

### Quality

- Full output control at the arc results in the correct settings for every weld.
- True Voltage Technology (TVT) accurately compensates for voltage drop across long cable runs.
- Eliminate unintentional machine adjustments by helpers or other operators.

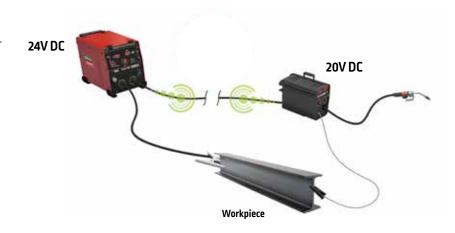
### Productivity

- Setup faster with fewer cable connections.
- Eliminate trips to the power source to make procedure adjustments.
- Minimize rework with easy settings adjustments.



# TRUE VOLTAGE TECHNOLOGY (TVT)

As is common in many outdoor welding applications: (Structural steel, Shipbuilding, Offshore, etc.) the operator can be located hundreds of feet away from the power source. Long cables and multiple connections can create a difference in voltage (voltage drop) between the power source and the weld. In the example to the right, 24volts is set on the welding power source. Due to electrical resistance through long cables, only 20volts are actually available at the arc. This may result in a cold weld.



True Voltage Technology (TVT) sees this drop and gives you the true voltage you set by adjusting the power source to compensate for the voltage drop. In the example below, 24v is preset at the Activ8X wire feeder. TVT senses there is a 4 volt drop due to long weld cables and compensates by increasing the welder output to 28V. The result is the desired 24v available at the welding arc.



# FLEXTEC 500X Controls

- 1. Amperage Display Meter
- 2. Thermal LED
- 3. Output Control Dial
- 4. Hot Start Control Dial
- 5. Weld Process Selector Switch
- Local/Remote Output Selector Toggle Switch
- 7. Circuit Breaker Reset Button for the5-pin Wire Feeder Connector
- 8. 5-pin ArcLink Wire Feeder Connector
- Positive and Negative 1/2 in. (12.7 mm)Welding Output Studs
- VRD® (Voltage Reduction Device)
   Indicator Lights
- 11. CrossLinc indicator light
- 12. Voltage Display Meter
- 13. Power Switch
- 14. Arc Force Control Dial
- Weld Terminals On/Remote Selector
   Switch
- 16. Circuit Breaker Reset Button for the14-pin Wire Feeder Connector
- 17. Remote Output Control (12-pin Universal Connector)
- 18. 14-pin Wire Feeder Connector
- Wire Feeder Voltmeter Polarity
   Selection Switch
- 20. Input Power Cord Strain Relief
- 21. Input Power Terminal Block
- 22. Input Fuse
- 23. Input Power Reconnect
- 24. Cooling Fan







### Weld Power Cable Twist Mate to Twist Mate

K14166-1 (70MM2-10M)

K14166-2 (70MM2-15M)

K14166-3 (70MM2-5M)

K14166-4 (70MM2-30M)

K14167-1 (95MM2-30M)

K14167-2 (95MM2-5M) K14167-3 (95MM2-10M)

K14167-4 (95MM2-15M)



### GRD-400A-70-xM\*

Ground cable 400A 70 mm<sup>2</sup>; x=5/10/15 m



### E/H-400A-70-xM\*

Electrode holder 400A/70mm<sup>2</sup>; x=5/10m



### K2909-1

12-pin to 6-pin Adapter



### K857-2

12-pin Remote Output Control



### K3059-4

Inverter and Wire Feeder Cart



K4424-1



Flextec 350x Locking Foot Kit



## K4068-1

Inverter Cart Mounting Kit (required to secure Power Feed® and Flex Feed™ feeders on the cart)



### K10095-1-15M

Remote control (6PIN, 15m)



# K10398

Extension cable for remote control box K10095-1-15M



### K3091-1

Multi-Process Switch

Easily change welding process and polarity without changing cables at the machine



### K10376

Adapter M14/Dinse (F)

### **MACHINE SPECIFICATIONS**

Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Output Range	HxWxD in (mm)	Net Weight Ib (kg)
FLEXTEC 500X	K3607-2	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)

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