Whether in a shop or in the field, the Flextec 350X welder is built to perform.

Equipped with CrossLinc® technology, the Flextec 350X welder can be controlled from hundreds of feet away without expensive and inconvenient control cables. Desert Duty® and IP23 rated, it can withstand harsh outdoor conditions and outperform other welders in its class.

In the field, the Flextec 350X Construction is a welder’s most effective weapon. As a rugged multi-process power source, this model stays reliable and offers much more than other inverter-based welders in its class.

In the shop, the Flextec 350X Standard model is built to work with all 42V feeders for your factory applications. It is also compatible with Arclink® digital feeders to provide synergic modes and memories for quick setup and seamless connectivity.

The Flextec 350X PowerConnect model adds the ability to weld with any input voltage between 200 and 600 volts and adds basic pulsed MIG output as a standard feature.
FEATURES

SIMPLE
- Simple interface for ease of use
- CrossLinc technology automatically pairs the accessory with the power source and provides remote output control at the arc without additional remotes or cables\(^1\)
- PowerConnect technology automatically adjusts to the input voltage without the need for a manual reconnect\(^2\)

RELIABLE
- Lab tested, field proven ruggedness and durability
- Engineered for outdoor use and harsh environments
- IP23 rated for use in outdoor weather conditions
- Desert Duty rated for operation at temperatures up to 55° C (131° F)
- Trayed and potted PC boards to help withstand welding dust and humidity

FLEXIBLE
- Multi-process power source for all your welding needs
- Optimized stick welding for both cellulosic and low hydrogen electrodes
- Compatible with CrossLinc, 42V analog, and digital feeders for GMAW and FCAW
- ArcLink enabled to provide synergic pulse modes for reduced spatter, lower heat input, increased productivity, and improved quality\(^3\)
- Touch-Start TIG\(^\text{®}\) for reducing contamination during starts without high frequency

SIMPLE
Flextecs are meant to be easy to use in order to increase productivity and decrease downtime. With a user-friendly control setup, settings can be configured with ease.

**Simple Mode Switch**
Choose your weld process:
- GTAW (TIG)
- SMAW (Stick)
- CV – gas shielded (MIG)
- CV-innershield\(^\text{®}\) (self-shielded)
- ArcLink for access to synergic and pulse modes (when using an ArcLink wire feeder)
- Carbon Arc Gouge in Stick or MIG modes

**Large Output Control**
Located front and center

**Remote Control Connection**
Plug in for remotes

**Welding Terminals**
Clearly labeled, quick connections

**Dedicated Hot Start**
Adjustable to help reduce sticking when stick welding

**Local/Remote rocker switch**
Choose to have control locally on the machine or remotely when using a wire feeder or remote control

**Dedicated Arc Control**
Less arc control (less pinch) in short arc wire processes to decrease spatter
More arc control in Stick welding reduces chance of sticking during welding

---

\(^1\) Requires CrossLinc technology enabled wire feeder or CrossLinc remote.
\(^2\) Requires K4273-1 PowerConnect model.
\(^3\) Requires K4273-1 PowerConnect model and an ArcLink enabled feeder to access pulse modes.
**RELIABLE**

Flextecs are built to withstand harsh conditions so that they last to help get the job done. Operating in challenging environments, these machines are durable and protected from the elements.

- Tough alloy handles for lifting and impact protection
- Lightweight aluminum powder painted case for rust protection
- Shock Absorbing Rubber Feet for impact protection
- Smart fans* run at variable speeds to keep components cool

*Variable speed smart fans are included in the PowerConnect model only.

**FLEXIBLE**

Flextecs are meant to be just that, flexible. With a variety of processes and feeder compatibilities, the Flextec product line is made up of the most versatile welders on the market.

**Any Process**
- GTAW, SMAW, GMAW, GMAW-P, FCAW-S, FCAW-G, GAC

**Any Input Voltage**
- 200V
- 208V
- 220V
- 230V
- 380V
- 400V
- 415V
- 440V
- 460V
- 480V
- 575V
- 600V

The Flextec 350X PowerConnect model automatically connects to any input power from 200-600 volts single or three phase. This allows the machine to be used anywhere in the world and to compensate for large fluctuations in incoming voltage.
CrossLinc with True Voltage Technology (TVT) – Improve all aspects of your operation with CrossLinc 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 jobsite

**Quality**
- Full output control at the arc allows the welder to input 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 helpers or trips to the power source to make procedure adjustments
- Minimize rework with easy settings adjustments

CrossLinc allows for amperage and voltage control at the welding arc to improve control of your operation.
- No need for an additional control cable — communication occurs directly over the weld cables:
  1. Set the desired voltage on the CrossLinc wire feeder
  2. The feeder sends a signal to the CrossLinc power source
  3. The power source will change to the desired voltage

CrossLinc also features True Voltage Technology to compensate for voltage drop across the welding circuit.
- TVT will measure the voltage drop and adjust the power source to compensate for the difference between the desired voltage and actual voltage at the weld:
  1. Preset the wire feeder to the desired voltage
  2. Make a test weld
  3. The system will measure voltage drop and automatically adjust the power source to compensate

**PULSE**

Pulsed spray is a non-contact transfer method between the electrode and the weld puddle. This means that at no time does the electrode ever touch the puddle. This is accomplished through high-speed manipulation of the electrical output of the welding machine. It is designed to be a spatterless process that will run at a lower heat input than spray or globular transfer methods.

**Advantages provided by pulsing machines include:**
- Spatter and fume reduction
- Heat reduction
- Improved productivity
- Better control
**Field Setup**

The Flextec 350X Construction was built to excel on site. When paired with a CrossLinc enabled accessory you can control the output right at the arc, without the need for extra cables.

**Factory Setup**

The flexible, multi-process Flextec 350X Standard is ready to satisfy all your fabrication needs.

### Wire Size Chart

<table>
<thead>
<tr>
<th>Wire Size</th>
<th>Steel</th>
<th>Stainless</th>
<th>Metalcore</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.035</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.040</td>
<td></td>
<td></td>
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<tr>
<td>0.045</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/64</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.052</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/16</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Synergic Pulse Modes (PowerConnect Model)**

- **1** Machine Flextec 350X Standard (8 ft. power cord included)
- **2** Feeder LN-26X
- **3** Control Cable None
- **4** Gun KD26 Pro, 15 ft. full assembly
- **5** Gun Connector Kit Tweco® #2 - #4 gun back end for Magnum PRO Guns
- **6** Work Cable Tweco®-Style male plug and 0.53 in. lug, 2/0, 350A, 60% duty cycle, 50 ft. (15.2 m)
- **7** Work Clamp GC 500 Work Clamp
- **8** Weld Power Cable Tweco®-Style male plug and female receptacle, 2/0, 350A 60% duty cycle, 50 ft. (15.2 m)
- **9** Feeder Bushing 10-Series Tweco #2 - #4 (Included with Feeder)
- **10** Machine Flextec 350X Standard (8 ft. power cord included)
- **11** Feeder LF-72 (HD No Gun)
- **12** Control Cable 14-pin Male to 14- Pin Female Extension
- **13** Gun Magnum PRO Curve 300, 15 ft Ready pak®, Tweco #4
- **14** Work & Power Cables Tweco to Lug w/Ground Clamp, 2/0, 15 ft work and 10 ft power 350A@60%
- **15** Work Clamp GC 500 Work Clamp
- **16** Weld Power Cable Tweco®-Style male plug and female receptacle, 2/0, 350A 60% duty cycle, 50 ft. (15.2 m)
- **17** Feeder Bushing PF84 Series Tweco #2 - #4 (Included with Feeder)
FLEXTEC 350X
Construction Controls »
1. Amperage Display
2. Thermal LED
3. Output Control Dial
4. Weld Process Selector Switch
5. Remote Output Control (12-pin Universal Connector)
6. Positive and Negative Welding Output Studs (Tweco-style)
7. Voltage Display
8. VRD™ (Voltage Reduction Device) Indicator Lights
9. CrossLinc Indicator Light
10. Hot Start Control Dial
11. Arc Control Dial
12. Local/Remote Selector Toggle Switch
13. Power Switch

FLEXTEC 350X
Standard/PowerConnect Controls »
1. Amperage Display
2. Thermal LED
3. Output Control Dial
4. Weld Process Selector Switch
5. Remote Output Control (12-pin Universal Connector)
6. 5-pin ArcLink Wire Feeder Connector
7. 14-pin Wire Feeder Connector
8. Positive and Negative Welding Output Studs (Tweco-style)
9. Voltage Display
10. VRD (Voltage Reduction Device) Indicator Lights
11. CrossLinc Indicator Light
12. Hot Start Control Dial
13. Arc Control Dial
14. Local/Remote Selector Toggle Switch
15. Weld Terminals On/Remote Selector Switch
16. Power Switch
17. Wire Feeder Voltmeter Polarity Selection Switch
### WHAT'S INCLUDED

<table>
<thead>
<tr>
<th>Package Product No.</th>
<th>Description</th>
<th>Product Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-Pak® - shipped as single kit</td>
<td>Flextec 350X PowerConnect Tweco (K4273)</td>
<td>K4274-1</td>
</tr>
<tr>
<td>Ready-Pak - shipped fully assembled</td>
<td>Flextec 350X Standard Tweco (K4272)</td>
<td>K4274-2</td>
</tr>
<tr>
<td></td>
<td>Power Source Model</td>
<td>K4274-3</td>
</tr>
<tr>
<td></td>
<td>Flextec 350X Construction Tweco (K4271)</td>
<td>K4278-1</td>
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<table>
<thead>
<tr>
<th>Wire Feeder Model</th>
<th>Description</th>
<th>Product Number</th>
</tr>
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<tbody>
<tr>
<td>LF-72 HD</td>
<td>Flextec 350X PowerConnect Tweco (K4273)</td>
<td>K2327</td>
</tr>
<tr>
<td>LF-74 HD</td>
<td>Flextec 350X Standard Tweco (K4272)</td>
<td>K2326</td>
</tr>
<tr>
<td>Flex Feed 84 HD</td>
<td>K5000</td>
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</tr>
<tr>
<td>LN-26X Tweco no flowmeter</td>
<td>K4267</td>
<td></td>
</tr>
<tr>
<td>Power Feed 84 HD, USB</td>
<td>K3328</td>
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<table>
<thead>
<tr>
<th>Drive Rolls</th>
<th>Description</th>
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<tr>
<td>.035/.045 solid dual groove 2-roll</td>
<td>KP1696</td>
<td></td>
</tr>
<tr>
<td>.045 Cored 2-roll</td>
<td>KP1697</td>
<td></td>
</tr>
<tr>
<td>.035/.045 solid dual groove 4-roll</td>
<td>KP1505</td>
<td></td>
</tr>
<tr>
<td>.045 Solid 4-roll</td>
<td>KP1505-045S</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accessories</th>
<th>Description</th>
<th>Product Number</th>
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</thead>
<tbody>
<tr>
<td>Magnum Pro Curve 300 15ft</td>
<td>K2951</td>
<td></td>
</tr>
<tr>
<td>Tweco Cable Package - 10ft work with ground clamp, 10ft electrode</td>
<td>K1803</td>
<td></td>
</tr>
<tr>
<td>Harris Flowmeter Regulator and hose</td>
<td>K3059</td>
<td></td>
</tr>
</tbody>
</table>

### Additional Flextec Models

<table>
<thead>
<tr>
<th>Description</th>
<th>Product Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flextec 350X PowerConnect (Twistmate)</td>
<td>K3443</td>
</tr>
<tr>
<td>Flextec 350X Standard CE (Twistmate)</td>
<td>K4284</td>
</tr>
<tr>
<td>Flextec 350X Construction (Tweco)</td>
<td>K4271</td>
</tr>
<tr>
<td>Flextec 350X Construction CE (Twistmate)</td>
<td>K4283</td>
</tr>
</tbody>
</table>

*All Flextec 350X models except the CCC Model (K3586-1) include 10-ft input cord

### Flextec Racks

- K3402-1 Flextec 350X Construction 4-pack Rack
- K3403-2 Flextec 350X Standard 4-pack Rack
- K4277-1 Flextec 350X Construction 6-pack rack
- K4281-1 Flextec 350X Standard 6-Pack Rack
GENERAL OPTIONS

Multi-Process Switch
Easily change welding process and polarity without changing cables at the machine
Order K3091-1

Flextec 350X CE Filter Kit
(380-575 Vac)
Order K4420-1

Weld Cable Package
2, 10ft. 2/0 cables with Tweco plug and lug. Also includes GC500 work clamp
Order K3803-2

Harris® Model 105 Flowmeter Regulator and Hose
Includes 10 ft. (3.0 m) hose
Order: K300211

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 Flextec
Order 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 Flextec
Order K3059-5

Inverter Cart Mounting Bracket Kit
Use for mounting Flex Feed or Power Feed (to the K3059-4 inverter cart)
Order K4068-1

Flextec 350X Locking Foot Kit
Allows the Flextec to lock to the inverter cart. Multi-Process Switch, Cool Arc® 55 water cooler
Order K4424-1

12-pin to 6-pin Adapter
Allows 6-pin remote controls (K2970, K3613-3, K3677, K4217-1) to be used with 12-pin Universal Connection
Order K2909-1

LC-40
Tweco-Style Plug
(male, 1/0 Thru 2/0)
Order K3486-70

LC-40
Tweco-Style Receptacle
(female, 1/0 Thru 2/0)
Order K3497-70

LC-40HD
Tweco-Style Plug
(male, 3/0 Thru 4/0)
Order K3496-90

LC-40HD
Tweco-Style Receptacle
(female, 3/0 Thru 4/0)
Order K3497-90

STICK OPTIONS

CrossLinc Remote
Adjust voltage or current at the arc. For CrossLinc-equipped welders. See publication MC16-137
Order K4345-1

Remote Output Control with 12-pin Universal Connector
Permits remote adjustment of output
Order K870-2 [25 ft.]
Order K870-3 [100 ft.]

TIG OPTIONS

Wireless Foot Pedal with 6-pin Amphenol®
Permits remote adjustment of output
Order K4217-1

Foot Amptral with 12-pin Amphenol Connector [25 ft.]
Remote current control for TIG welding
Order K4370-2

Hand Amptral Rotary Track Style, 12-pin Amphenol [25 ft.]
Remote current control for TIG welding
Order K3663-4

RECOMMENDED ACCESSORIES

(Requires the K2909-1 12-pin to 6-pin adapter if used with Flextec 500X)

WIRE FEEDER OPTIONS

LN-25X
Includes CrossLinc communication technology and TVT
Order K4267-2

ActiveIX
Compact, lightweight, portable feeder with CrossLinc Technology and TVT
Order K3519-1
[See Publication E14.109]

LF-72 Bench Model
Two drive roll feeder designed for MIG and cored wire welding in job shop and manufacturing environments
See Publication E41.11

LF-74 Bench Model
Four drive roll feeder designed for MIG and cored wire welding in job shop and manufacturing environments
See Publication E41.11

Flex Feed 34 HT
Four drive-roll, high-torque, industrial semiautomatic wire feeder for general/structural fabrication
See Publication E41.203

Flex Feed 84 Single Bench
Four drive roll feeder with heavy duty wire reel stand for general/structural fabrication
See Publication E41.205

Flex Feed 84 Dual Bench
Four drive roll feeder with heavy duty wire reel stand and contactor for general/structural fabrication
See Publication E41.206

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
See Publication E41.268
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FLEXTEC 350X - MODEL SELECTION

<table>
<thead>
<tr>
<th>Features</th>
<th>Flextec 350X PowerConnect</th>
<th>Flextec 350X Standard</th>
<th>Flextec 350X Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>200-600V/1/3/50/60</td>
<td>380-600/3/50/60</td>
<td>380-600/3/50/60</td>
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<tr>
<td>3-phase</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>1-phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CrossLinc compatible feeders</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>14-pin Analog, 42V feeders</td>
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<td>●</td>
</tr>
<tr>
<td>5-Pin Digital, 42V feeders</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>GTAW Touch Start TIG</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SMAW (Stick)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>GMAW (MIG)</td>
<td>●</td>
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<tr>
<td>FCAW (Flux cored)</td>
<td>●</td>
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<td>FCAW-G (Gas shielded Flux-cored)</td>
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<td>GMAW-P (Pulsed MIG)</td>
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<td>Gouging (Recommended)</td>
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MACHINE SPECIFICATIONS

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<tr>
<th>Product Number</th>
<th>Product Name</th>
<th>Input Power</th>
<th>Rated Output Current/Voltage/Duty Cycle</th>
<th>Input Current @Rated Output</th>
<th>Output Range</th>
<th>Dimensions HxWxL in (mm)</th>
<th>Weight lb (kg)</th>
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</thead>
<tbody>
<tr>
<td>K4271-1</td>
<td>Flextec 350X</td>
<td>380/460/575/50/60</td>
<td>350A/34V/60%</td>
<td>18/425A</td>
<td>5-425A</td>
<td>17 x 13 x 23 (432 x 332 x 584)</td>
<td>77 (34.9)</td>
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<tr>
<td>K4272-1</td>
<td>Flextec 350X</td>
<td>300A/32V/100%</td>
<td>23/20/21</td>
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<td>82 (37.1)</td>
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<tr>
<td>K4273-1</td>
<td>Flextec 350X</td>
<td>200-208/220-230/380-415/460/575/50/60</td>
<td>350A/34V/60%</td>
<td>17 x 13 x 24 (432 x 330 x 609)</td>
<td>84 (38.1)</td>
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<tr>
<td></td>
<td>PowerConnect</td>
<td>3-phase</td>
<td>45/40/23/19/15</td>
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<td>3-phase</td>
<td>300A/32V/100%</td>
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<td>1-Phase</td>
<td>380-415/460/575</td>
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<td>300A/32V/100%</td>
<td>39/32/6</td>
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<tr>
<td></td>
<td></td>
<td>50/60 Hz</td>
<td>300A/32V/100%</td>
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<td>200-208/220-230</td>
<td>300A/32V/60%</td>
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<td>300A/32V/100%</td>
<td>62/56</td>
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<td>50/60 Hz</td>
<td>270A/31V/100%</td>
<td></td>
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</tbody>
</table>


Manufactured at a facility with certified ISO Quality and Environmental Management Systems.

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