

# DESIGNED SMART. BUILT TOUGH.

Invertec® V350 PRO



Shown: K1728-6

## KEY FEATURES

The multi-process Invertec V350 PRO machine is an efficient, lightweight and portable choice for training, fabrication or construction applications. Its ability to accept input power from 208-575V and 1-phase or 3-phase power makes it versatile and ready for applications around the world.

### Processes »

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

### Output »



### Input »



### Product Number »

K1728-5, K1728-6, K1728-13,  
K1728-12, K2437-2





## FEATURES

- » **Exceptional Multi-Process Fabrication Welding**
  - CC - Stick Soft
  - CC - Stick Crisp
  - DC TIG
  - CV - Wire – For MIG and Metal-Cored
  - CV - Innershield® and Outershield® Flux-Cored
  - Arc Gouging – Accessible from All Modes – Plenty of power to handle a 5/16 in. (7.9 mm) carbon
- » **All input voltages and frequencies are both single and three phase rated**  
No output derating necessary on single phase.
- » **5-425 amp output range**  
For all recommended processes from DC TIG to arc gouging.
- » **Input voltage from 208-575 and 50 and 60 Hz operation**  
One machine runs on virtually any input power supply.
- » **Touch Start TIG®**  
For contamination-free starts.
- » **Low power consumption for energy savings 88% efficiency.**
- » **Parallel two units**  
For 700A carbon arc gouging.
- » **Bright, large digital amp and volt meters are easy to monitor**  
Even in sunlight – and presettable for precise procedure control.
- » **Rugged skid and tube handles**  
For convenience and added protection.

## APPLICATIONS

- Metal Fabrication
- Construction
- Structural Fabrication
- Schools and Training Facilities
- Maintenance and Repair

## RECOMMENDED FEEDERS

- LF-72
- LF-74
- LN-10
- DH-10
- LN-25 PRO
- LN-25 PRO Dual Power
- Flex Feed® 74HT
- Flex Feed® 84





## KEY CONTROLS

### Construction Model (K1728-5)

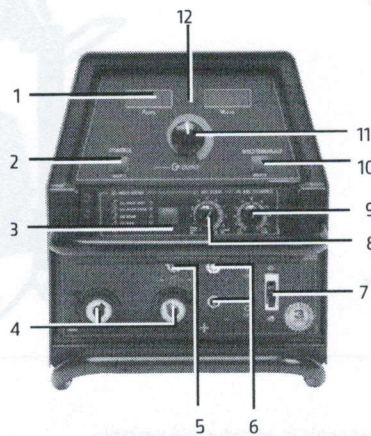
Our lightest, most portable model at a value price for conventional MIG, cored, stick, arc gouging and non-remote output control DC TIG applications.

Great For:

- Construction, maintenance or shop welding.

Compatible with:

- LN-25® PRO model wire feeders.
- 6-pin and 14-pin MS connector not included.



- 1) Large, bright, easy to read meters
- 2) Local/remote output control
- 3) Mode selection switch
- 4) Negative and Positive Twist Mate™ Output Terminals
- 5) Wire Feeder Voltmeter Polarity Switch
- 6) Circuit Breaker Reset Buttons
- 7) On/Off Switch
- 8) Hot Start Control
- 9) Arc Control Knob
- 10) Weld Terminals on or remotely controlled
- 11) Preset Output Amps and Voltage Control
- 12) Thermal Overload Indicator Light

### Factory Model (K1728-6 with Twist Mate Cable Receptacles) (K1728-13 with Tweco Cable Receptacles)

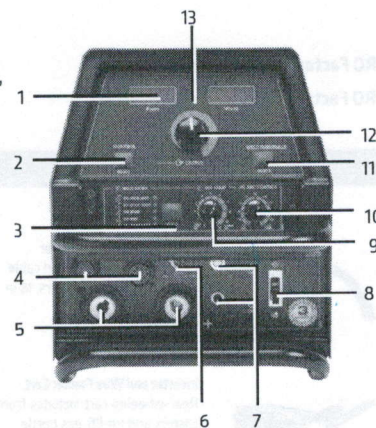
- Adds full remote capabilities and auto-detect local/remote override control.
- Versatile multi-process machine for MIG, cored, stick, TIG and arc gouging applications.

Great For:

- Construction or large-scale production factory applications.

Compatible with:

- LF-72, LF-74, LN-10, DH-10, and LN-25 PRO wire feeders.
- 6-pin and 14-pin MS-type connectors.



- 1) Large, bright, easy to read meters
- 2) Local/remote output control
- 3) Mode selection switch
- 4) Remote Output Control Receptacles – 6- & 14-pin
- 5) Negative and Positive Twist Mate or Tweco Output Terminals
- 6) Wire Feeder Voltmeter Polarity Switch
- 7) Circuit Breaker Reset Buttons
- 8) On/Off Switch
- 9) Hot Start Control
- 10) Arc Control Knob
- 11) Weld Terminals on or remotely controlled
- 12) Preset Output Amps and Voltage Control
- 13) Thermal Overload Indicator Light

Tweco® is a registered trademark of Thermadyne corporation.

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## SYSTEM SELECTION

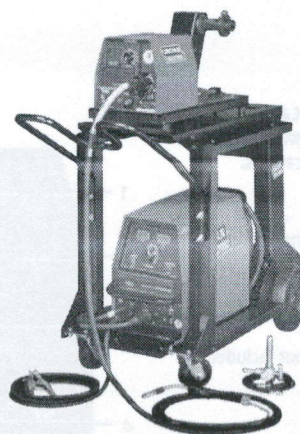
### Ready-Pak® Packages

Fully assembled and ready to weld—just add wire and gas.

#### V350 PRO Factory Model / LF-72 Heavy Duty Wire Feeder (for non-pulsed MIG Welding)

Order K2437-2

- V350 PRO Factory Model
- LF-72 Heavy Duty Wire Feeder
- 15 ft. (4.5 m) Magnum® PRO 350 gun and cable assembly w/ .035-.045 in. (0.9-1.2 mm) liner.
- Work and Wire Feeder 2/0 Welding Cable Package
- Harris® Flowmeter Regulator and Hose
- Heavy Duty Inverter and Wire Feeder Cart



Shown:  
Invertec V350 PRO Factory Model/  
LF-72 Heavy Duty Wire Feeder  
Ready-Pak

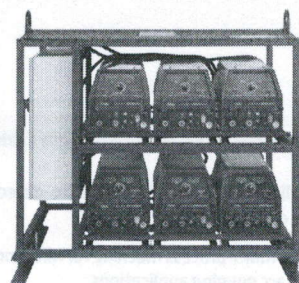
### V350 PRO Inverter Racks

- An ideal system to group several inverter power sources in an industrial portable package. Entire system meets National Electric Code (NEC) Standards.
- Includes Invertec V350 PRO Factory (Tweco) Model (K1728-13). This special rack version has all the same features as the factory model with added IP23S rating for outdoor use and Tweco cable receptacles.

Order:

K2667-1 4-Pack Inverter Rack with 4 Invertec V350 PRO Factory (Tweco) Power Sources

K2667-2 6-Pack Inverter Rack with 6 Invertec V350 PRO Factory (Tweco) Power Sources



## RECOMMENDED ACCESSORIES

### GENERAL OPTIONS

#### Deluxe Adjustable Gas Regulator & Hose Kit

Accommodates CO<sub>2</sub>, Argon, or Argon-blend gas cylinders. Includes a cylinder pressure gauge, dual scale flow gauge and 43 ft. (13 m) gas hose.

Order K586-1

#### Work and Wire Feeder 2/0 Weld Cable Package

Includes Twist Mate™ connectors, work clamps, 15 ft. (4.5 m) work cable and 10 ft. (3.0 m) electrode cable. Rated 350 amps, 60% duty cycle.

Order K1803-1

#### Twist Mate Cable Plug

For connecting welding cable to output terminal receptacles. For 1/0-2/0 (50-70 mm<sup>2</sup>) cable.

Order K852-70

#### Twist Mate Cable Plug

For connecting welding cable to output terminal receptacles. For 2/0-3/0 (70-95 mm<sup>2</sup>) cable.

Order K852-95

#### Twist Mate Cable Receptacle

For connecting welding cable to Twist Mate Cable Plug.

Order K1759-70 for 1/0-2/0 (50-70 mm<sup>2</sup>) cable

Order K1759-95 for 2/0-3/0 (70-95 mm<sup>2</sup>) cable

#### Twist Mate to Lug Adapter

For connection of lugged cable to Twist Mate connectors. 18 in. (457 mm) long

Order K2176-1

#### Inverter and Wire Feeder Cart

Rear-wheeled cart includes front casters and no-lift gas bottle platform. Convenient handles allow for easy cable storage while full length side trays store parts and tools. Shipped fully assembled. Small footprint fits through 30 in. (762 mm) door.

Order K1764-1

#### Dual Cylinder Kit

Permits side-by-side mounting of two full size gas cylinders, with easy loading. For use with K1764-1 cart. Order K1702-1

#### LC-40

Tweco-Style Plug (male, 1/0 Thru 2/0)

Order K3416-70

#### LC-40

Tweco-Style Receptacle (female, 1/0 Thru 2/0)

Order K3417-70

#### LC-40HD

Tweco-Style Plug (male, 3/0 Thru 4/0)

Order K3416-90

#### LC-40HD

Tweco-Style Receptacle (female, 3/0 Thru 4/0)

Order K3417-90

### STICK OPTIONS

#### Accessory Kit

For stick welding. Includes 35 ft. (10.7 m) 2/0 electrode cable with lug, 30 ft. (9.1 m) 2/0 work cable with lugs, headshield, filter plate, cover plate, work clamp and electrode holder. 400 amp capacity.

Order K704

#### Accessory Kit

For stick welding. Includes 20 ft. (6.1 m) #6 electrode cable with lug, 15 ft. (4.6 m) #6 work cable with lugs, headshield, work clamp, electrode holder and sample pack of mild steel electrode. 150 amp capacity.

Order K875

#### Remote Output Control

For remote output of welding voltage. Consists of control box with four conductor cable and 6-pin MS-type connector.

Order K857 for 25 ft. (7.6 m)

Order K857-1 for 100 ft. (30 m)

Invertec V350 PRO [41]



## RECOMMENDED ACCESSORIES

### TIG OPTIONS



**Pro-Torch™ TIG Torches**  
A full line of air-cooled and water-cooled torches available.  
Request Lincoln publication E12.150



**TIG Module**  
Portable, high frequency unit with gas valve for TIG welding. Rated at 300 amps/60% duty cycle. Requires TIG Module Control Cable.  
Order K930-2



**TIG Module Control Cable**  
(For Factory and Advanced Process Models only) 9-pin connector at the TIG Module to 14-pin MS type connector at the power source. (Contains input power, remote control, contactor control, and ground circuits). For machines having a 14-pin remote control and power receptacle.  
Order K936-1



**TIG Module Control Cable**  
(For Construction Model only) 9-pin connector at the TIG Module to a grounded 115V plug. (Contains input power, and ground circuits). For machines having no remote control capability.  
Order K936-4



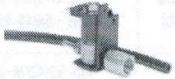
**Hand Amptrol™**  
Provides 25 ft. (7.6 m) of remote current control for TIG welding. (6-pin plug connection).  
Order K963-3



**Foot Amptrol™**  
Provides 25 ft. (7.6 m) of remote current control for TIG welding. (6-pin plug connection).  
Order K870



**Arc Start Switch**  
May be used in place of the Foot or Hand Amptrol. Comes with a 25 ft. (7.6 m) cable. Attaches to the TIG torch for convenient finger control to start and stop the weld cycle at the current set on the machine.  
Order K814



**Inverter TIG Solenoid Kit**  
Mounts inside the back of the V350 PRO. Switches gas flow in the V350 PRO through the Twist Mate™ connector. Includes gas hose and solenoid. (Not compatible with construction and factory [Tweco] models).  
Order K1762-2



**Twist Mate Torch Adapter**  
For connection of Pro-Torch TIG torches (1 piece cable) to power sources with gas passing through the Twist Mate connection. For use with K1762-2.  
Order K1622-1 For air-cooled PTA-9 or PTA-17 torches.



Order K1622-3 For air-cooled PTA-26 torches.



Order K1622-4 For water-cooled torches.



**Twist Mate Torch Adapter**  
For connection of PTA-9 or PTA-17V torches (1 piece cable) to power sources without gas passing through the Twist Mate connection.  
Order K960-1



**TIG-Mate™ 17V Air-Cooled TIG Torch Starter Kit**  
Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTA-17V torch, parts kit, Harris flowmeter/regulator, 10 ft. (3.0 m) gas hose, and work clamp and cable.  
Order K2265-1



**TIG-Mate 17 Air-Cooled TIG Torch Starter Kit**  
Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTA-17 torch, parts kit, Harris flowmeter/regulator, 10 ft. (3.0 m) gas hose, Twist Mate™ adapter, and work clamp and cable.  
Order K2266-1



**TIG-Mate 20 Water-Cooled TIG Torch Starter Kit**  
Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTW-20 torch, parts kit, Harris flowmeter/regulator, 10 ft. (3.0 m) gas hose, Twist Mate adapter, work clamp and cable and 10 ft. (3.0 m) water hose.  
Order K2267-1



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## PRODUCT SPECIFICATIONS

| Product Name      | Product Number | Model           | Input Power                               | Rated Output Current/Voltage/<br>Duty Cycle  | Input Current @ Rated Output  | Output Range                 | H x W x D inches (mm)                   | Net Weight lbs. (kg) |
|-------------------|----------------|-----------------|---|--|---|------------------------------|---|----------------------|
| Invertec V350 PRO | K1728-5        | Construction    | 200-208/230/380-415/<br>460/575/1/3/50/60 | 350A/34V/60%   | 3ph: 50/42/28-26/23/18<br>1ph: 94/85/54/42/37   | 5-425A<br>Max OCV:<br>80V DC | 14.8 x 13.3 x 27.8<br>(376 x 338 x 709) | 81 (36.7)            |
|                   | K1728-6        | Factory         | 208/230/415/<br>460/575/1/3/50/60         | 350A/34V/60%   | 3ph: 41-39/36/23-22/19/16<br>1ph: 76/69/41/36/31  |                              |   | 81.5 (37)            |
|                   | K1728-13       | Factory (Tweco) | 200-220/380-400/<br>415-440/1/3/50/60     | 350A/34V/60% (3ph)<br>320A/33V/60% (1ph)<br>300A/32V/100% (3ph)<br>275A/31V/100% (1ph) | 3ph: 48/28-27/26-24<br>1ph: - 82/55-50/48-45<br>3ph: 41-37/28-22/22-21<br>1ph: - 64/44-43/38-35 |                              |   |                      |
|                   | K1728-12       | CE              |   |  |   |                              |   |                      |
| LF-72 Ready-Pak   | K2437-2        | Factory         | 200-208/230/380-415/<br>460/575/1/3/50/60 | 350A/34V/60%<br>300A/32V/100%  | 3ph: 50/42/28-26/23/18<br>1ph: 94/85/54/42/37   |                              |   | 370 (167.8)          |

For best welding results with Lincoln Electric equipment, always use Lincoln Electric consumables. Visit [www.lincolnelectric.com](http://www.lincolnelectric.com) for more details.

### 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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