

POWER SOURCES FOR THE OFFSHORE INDUSTRY

| TYPE OF SYSTEM | GTAW | SMAW | GOUGE | FCAW-S | FCAW-G | GMAW | SAW |
|---|-----------------------|--|----------------------------------|------------------|--------|---|-----|
| INDUSTRIAL (Meets general process requirements) < 400A | Traditional Solutions | Idealarc® 250 | | | CV-305 | | |
| | | Precision TIG® 275 | | | CV-400 | | |
| | | Idealarc® R3R-400 | | | | | |
| | | Precision TIG® 375 | | | | | |
| | Idealarc® DC-400 | | | | | | |
| | Classic® 300D | | Classic® 300D w/Wire Feed Module | | | | |
| | Advanced Solutions | Invertec® V155-S | | | | | |
| | | Invertec® V275-S | | | | | |
| | | Invertec® V160-T | | | | | |
| | | Invertec® V205-T DC | | | | | |
| Invertec® V205-T AC/DC | | | | | | | |
| Invertec® V350-PRO | | Ranger® 305 G and Ranger® 305 D | | | | | |
| Vantage® 300 | | Big Red™ 500 | | | | | |
| HEAVY INDUSTRIAL (Overmatch semiautomatic and provide more gouge output) 400A-700A | Traditional Solutions | Idealarc® R3R-500 | | | | | |
| | | | | Idealarc® DC-600 | | | |
| | | | | Idealarc® DC-655 | | | |
| | SAE-500 | | SAE-500 w/CV Adapter | | | | |
| | SAE-500 Severe Duty | | | | | | |
| | Advanced Solutions | Flextec™ 450 | | | | | |
| Vantage® 400 | | | | | | | |
| Vantage® 500 | | | | | | | |
| Air Vantage® 500 | | | | | | | |
| SUBMERGED ARC & HEAVY GOUGE >700A | Traditional Solutions | | Idealarc® DC-1000 | | | Idealarc® DC-1000 Idealarc® AC-1200 Idealarc® DC-1500 | |
| | | | | | | Power Wave® AC/DC 1000® SD | |
| WAVEFORM CONTROL TECHNOLOGY® & FULL FEATURED PULSE | Traditional Solutions | Invertec® V310-T AC/DC | | | | Invertec® STT® II | |
| | | Power Wave® C300 | | Power Wave® C300 | | | |
| | | Power Wave® 355M | | Power Wave® 355M | | | |
| | | Power Wave® S350 with optional STT® module | | | | | |
| | | Power Wave® 455M and Power Wave® 455M/STT® | | | | | |
| Power Wave® 655 Robotic | | | | | | | |
| MULTI-OPERATOR SYSTEMS | Advanced Solutions | Multi-Weld™ 350 | | Multi-Weld™ 350 | | | |
| | | Invertec® V275-S | | | | | |
| | | Invertec® V350-PRO Rack Model | | | | | |
| Invertec® V450-PRO Rack Model | | | | | | | |

* This matrix represents the most relevant products for offshore fabrication. Lincoln Electric offers additional equipment solutions to handle special or unusual applications. Please see product literature or consult your Lincoln Electric representative for complete details.

RUGGED INDUSTRIAL SOLUTIONS

Idealarc® DC-400 and DC-600

- Transformer-based, multi-process welding capability along with arc gouging.
- Rugged construction, simple controls and plenty of amperage for heavy duty applications.



K1288-17
Idealarc® DC-600



ENERGY-EFFICIENT INVERTER TECHNOLOGY

LF-72 and LF-74

- 2 Roll or 4 Roll MAXTRAC® wire drive.
- Bench, boom-mount or hard automation fixture models available.
- Positive arc starting and feeding with steel, stainless steel, aluminum and flux-cored wires.



K2426-3 LF-74 Bench Model Heavy Duty, Extra Torque Industrial Wire Feeder

K2327-2 LF-72 Bench Model Standard Duty, Industrial Wire Feeder (shown with optional wire)

Flextec™ 450

- Simple Operation
- Bright Digital Amp and Volt Meters
- Compact, Durable Case
- Selectable Hot Start



Flextec™ 450
K2882-1

LN™-25 Wire Feeders

- Ideal for field construction and fabrication.
- The new Dual Power model can be powered with either a control cable or across the arc.
- Lightweight, impact and flame resistant, replaceable polycarbonate case keeps the internal components protected.
- 2-Step/trigger interlock provides comfort for long welds.



K2614-1 LN™-25 PRO Dual Power Wire Feeder

K2613-1 LN-25 PRO Standard Wire Feeder

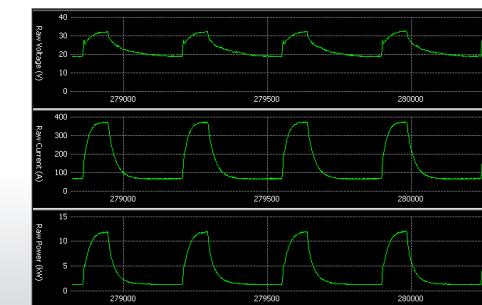
K2614-5 LN-25 PIPE Wire Feeder

ADVANCED PROCESS SOLUTIONS

Power Wave® Equipment Platform



- Energy efficient inverter-based welding power sources.
- Greater Control – 40 or more welding waveforms for optimized performance on a number of materials and joints.
- Adaptable – Welding waveforms can be updated and customized for your application and environment.
- More productivity – Commonly deliver higher deposition rates than traditional CV processes.
- Easy, accurate heat input calculations using True Energy™.



True Energy™ Pulse

Power Feed™ 25M

- Construction Ready - Built tough for rough environments. Standard aluminum or optional plastic case.
- Advanced Process Control Panel allows easy access to the Power Wave® library of welding waveforms.
- Standard Push-Pull Capability – premium aluminum feeding performance, even with extended gun cables.



Open gap root pass welded with STT® technology



K2536-2 Power Feed™ 25M Wire Feeder, Aluminum Case

K2536-3 Power Feed™ 25M Wire Feeder, Plastic Case

HIGH-PRODUCTIVITY SUBMERGED ARC SOLUTIONS

Power Wave® AC/DC 1000® SD



- Industry's most advanced submerged arc power source.
- Extreme control over deposition and penetration.
- Run single or multiple arc applications.
- 95% power factor correction.



K2344-2 Power Wave® AC/DC 1000 SD



Cruiser™ Tractor

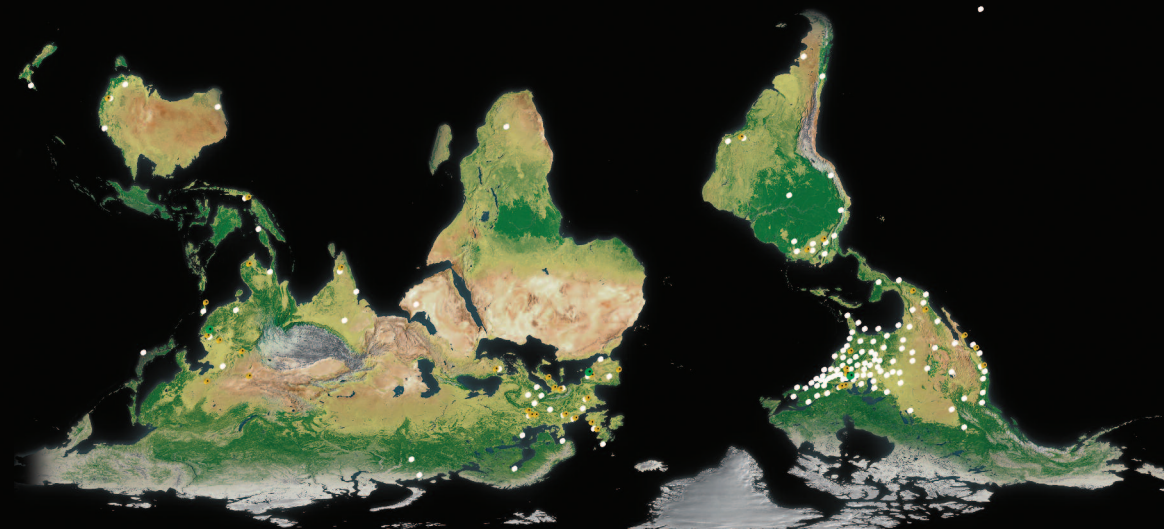
- Designed for welding big joints on big jobs.
- 3 or 4 wheel configuration for use with or without a track.
- Proven industrial Power Feed™ 10S Wire Drive feeds up to 7/32" diameter wire.



K2607-1 Cruiser™ Mechanized Tractor Wire Feeder



OFFSHORE Quick Look



With 38 manufacturing facilities in 18 countries and a worldwide network of distributors and sales offices covering more than 160 countries, Lincoln Electric has the resources and expertise necessary to provide reliable solutions to the global marketplace.

As a manufacturer of some of the world's first welding machines, Lincoln Electric has led the industry in innovation from the very beginning. Today, Lincoln Electric is known for its commitment to creating high quality, cost-effective welding and cutting solutions through advanced technology. Continuous expansion of worldwide manufacturing and distribution resources enables Lincoln Electric to provide reliable, industry-specific solutions to its customers around the world.

Total Welding Solutions for the Offshore Industry

Training, Automation and Cutting Solutions



- Virtual Reality Welding Trainer
- Reduce Training Costs
- Clean, Safe and Effective



- Drop-In-Place Pre-Engineered Solutions.
- Custom Systems Available for Unique Needs.
- Complete Fume Extraction Systems.

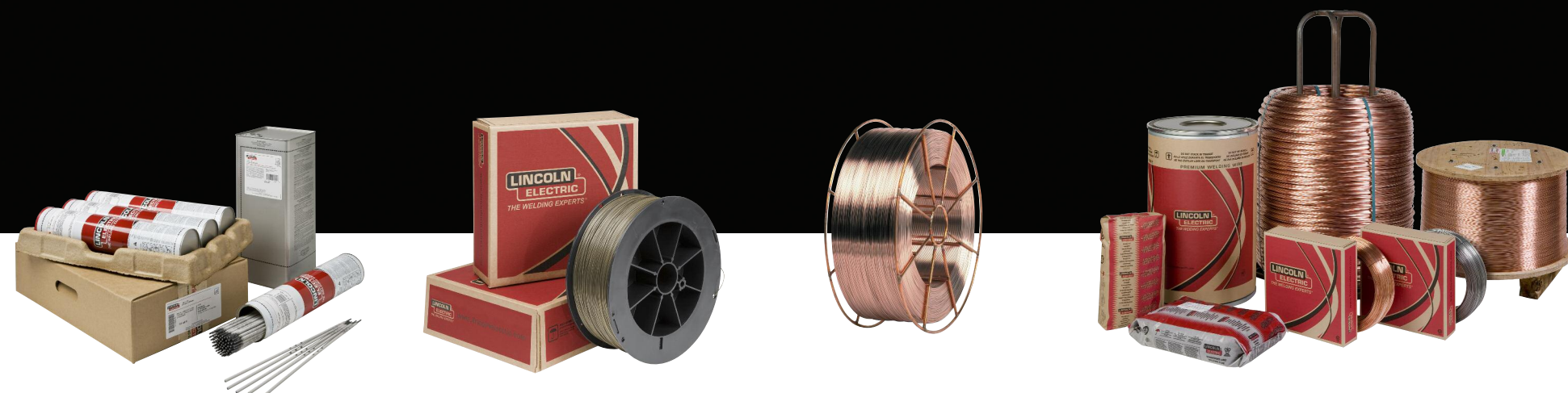


- Prepare T-K-Y joints with exceptional fit-up.
- Fast, accurate cuts on diameters from 2" - 84" (0.05 m - 2.1 m) O.D. and weights up to 90,000 lbs. (40,823 kg).

Consumable Solutions for the Offshore Industry



Optimize your offshore welding performance with Lincoln Electric's wide variety of Stick (SMAW), MIG (GMAW), Flux-Cored (FCAW), and Submerged Arc (SAW) consumables. Designed to exceed industry standards, UltraCore® flux-cored wire, SuperArc® L-59™ solid MIG wire and Lincolnweld® submerged arc flux and electrode deliver the weld properties and performance required for the most demanding offshore applications.



Excalibur® Low Hydrogen Stick Electrode

UltraCore® Stainless Wire

SuperArc® Solid MIG Wire

Lincolnweld® Submerged Arc Wire and Flux