

Power Wave® AC/DC 1000® SD

Increase Productivity, Quality and Flexibility

The Power Wave® AC/DC 1000® SD delivers Waveform Control Technology® to submerged arc welding. Choose constant current or constant voltage operation and set variable frequency and amplitude. Software-driven AC, DC positive or DC negative output allows the user to control the deposition rate and penetration. The result over conventional power sources is increased weld speeds, consistently higher quality welds and improved efficiencies in a single or multi-arc environment.

Processes

- DC+ Submerged Arc
- DC- Submerged Arc
- Balanced AC Submerged Arc
- Variable AC Submerged Arc



Output



Input



Key Features

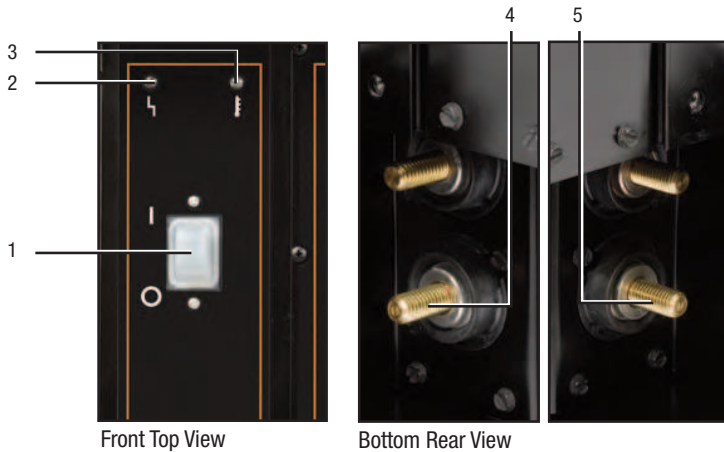
- **380 - 575 VAC, 50/60Hz Voltage Input** – Offers the ability to be connected anywhere in the world.
- **Voltage Compensation and Reliable Input Voltage Connection** – Provides consistent operation over $\pm 10\%$ input voltage variation.
- **No Hardware Reconfiguration Required with Easy Polarity Switching** – Eliminates downtime.
- **Easy to Parallel Machines or Run Multiple Arcs.**
- **3-Phase Voltage Input** – Eliminates the imbalance associated with transformer-based AC welding machines.
- **95% Power Factor Correction** – Enables connection of multiple machines on the same plant infrastructure for lower installation costs.
- **Severe Duty** – Can be stored outdoors. IP23 Rated.
- **ArcLink®, Ethernet, and DeviceNet™ Communication** – Offers remote process monitoring, control and troubleshooting.
- **True Energy™** – Measures, calculates and displays instantaneous energy in the weld for critical heat input calculations.
- **Production Monitoring™ 2** – Track equipment usage, store weld data and configure limits to assist in welding efficiency analysis.
- **Software Based Controls** – Can be upgraded as new features become available.
- **iARC™ Digital Control** - 90 times faster than the previous generation, delivering a responsive arc.
- **Each Unit is** – Factory burn-in tested at maximum output for 2 hours to ensure quality and reliability.

Technical Specifications

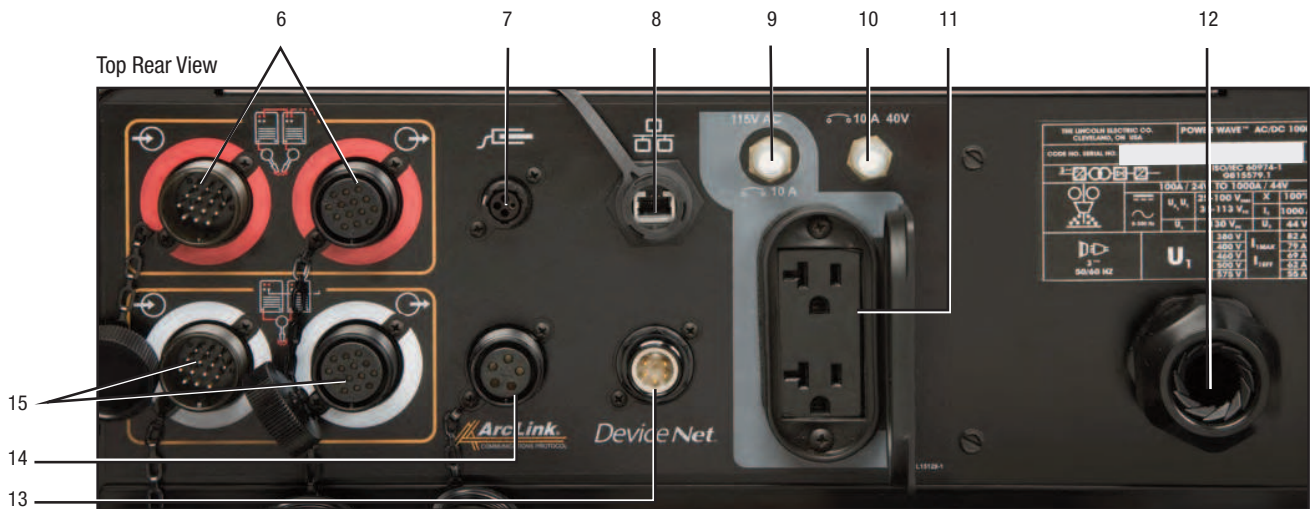
Product Name	Product Number	Input Voltage	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Output Range	Dimensions H x W x D in. (mm)	Net Weight lbs. (kg)
Power Wave® AC/DC 1000® SD	K2803-1 ⁽¹⁾	380/400/460/500/575/3/50/60	1000A/44V/100%	82/79/69/62/55	100-1000A	49.2 x 19.2 x 46.2 (1250 x 488 x 1174)	800 (363)

⁽¹⁾ Filter is required to meet CE conducted emission requirements. The K2444-3 must be used with the K2803-1.

KEY CONTROLS



- | | |
|--|---|
| 1. Power Switch | 9. Auxiliary Power Circuit Breaker |
| 2. Status Lights | 10. 10 Amp Wire Feeder Circuit Breaker |
| 3. Thermal Light | 11. Auxiliary Output (115V, 10A AC) |
| 4. Electrode Studs | 12. Input Cable Location |
| 5. Work Studs | 13. DeviceNET™ Connector |
| 6. I/O Connectors for Synchronizing Machines | 14. Controller ArcLink® Connector |
| 7. Work Sense Lead Connector | 15. I/O Connectors for Paralleling Machines |
| 8. Ethernet Connector | |



FEATURE LOADED, RUGGED CONSTRUCTION AND EASY MAINTENANCE

1. Easy Maintenance designed for Extreme Environments

- Pull-out back panel provides fast access to heat sinks and other components
- Re-Usable filter prevents particulate matter from entering the machine.

2. Production Monitoring™ 2

- Web-based Production Monitoring™ 2 allows fabricators to analyze and improve their welding operations and processes.

3. Easy-access Reconnect Panel

- Connect the Power Wave® AC/DC 1000® SD to an electrical connection almost anywhere in the world (380 up to 575 Volt input power).

