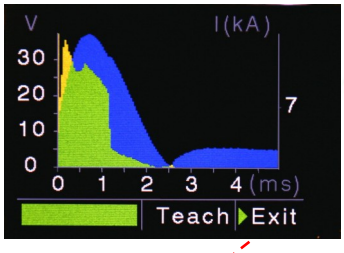
NELSON STUD WELDING

Advanced CD Welder

Ultra Portable



Weld Monitor

NCD+ 1000t & NCD+ 1600t

High performance digital fastening precision technology

NCD+™ is a dependable, new generation capacitor discharge (CD) stud welding power source developed around the traditional transformer rectifier CD power topology, but controlled by high performance 32-bit microprocessor with integrated DSP technology. The NCD+ 1000t and 1600t are the ideal tools to weld up to 5/16" (M8) CD studs with the contact CD or gap CD welding process to eliminate drilling, tapping, grinding and polishing operations. The features and benefits include:

NCD+

- **Portable.** Light weight power source producing conventional CD welding power.
- **Proven Power Topology.** Durable, long-life weld SCR and specially designed capacitors.
- **Built-in Process Monitoring.** Ensures weld quality. Provides full color graph of weld process.
- **Consistency and Reliability.** Weld strength consistently exceeds that of the stud or parent metal.
- **Assembly Quality.** Built in the U.S.A., to the demanding standards of ISO9001.
- **Power Convenience.** Operates on a standard wall outlet power input (120V).
- **Dissimilar Metals.** Mild steel stud can be welded to stainless, brass or copper.
- **Automation Capabilities.** Integrated into the design to allow the customer to autofeed studs, and connect to robotics. Autofeed systems are available for mass production.
- **Multi-Function Color Display.** Friendly, full color graphical user interface for operation and maintenance details.
- **Stud Expert™.** Weld voltage, spring pressure and gap database for various materials, thread sizes and gun types.
- **Circuit Breaker.** Over current protection without the inconvenience of replacing a fuse.
- **Polarity Change.** Ease of changing between straight and reverse polarity.
- **Stepless Voltage Adjustment.** Precision voltage setting, and adjustment.
- **Smart Discharge Circuit.** Ability to reduce the voltage setpoint without welding.
- **Chuck Saver.** Prevents chuck damage by not allowing accidental double trigger after the weld process.

Applications

- Thin sheet metal fabrication with minimal heat, distortion, backside marking & weld flash interference.
- Insulation pins in shipbuilding and construction.
- Materials with high thermal conductivity such as copper and aluminum alloys.

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DONCASTERS
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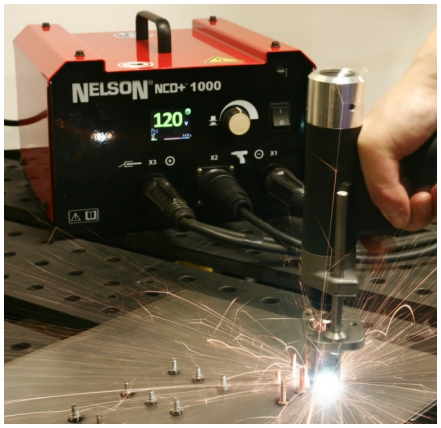
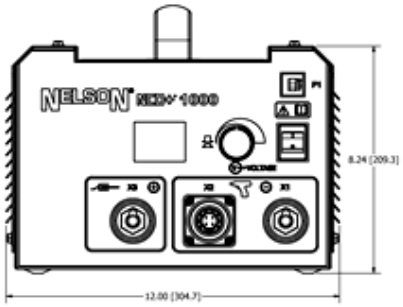
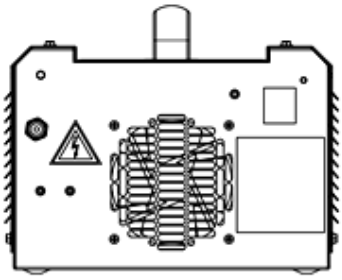
Technical Data

NCD+

	NCD+ 1000t	NCD+ 1600t
Thread Diameter	1/4”-20 (M6)	5/16”-18 (8mm)
Weld Base Diameter	5/16” (8mm)	3/8” (10.5mm)
Welding Process	Contact CD, Gap CD	
Stored Energy (Ws)	1080	1620
Cap Voltage (V)	70—200 (Stepless)	
Capacitance (µF)	54,000	81,000
Weld Rate (Studs / Minute)	18@100V, 8@200V	14@100V, 6@200V
Dimensions	12 5/8” x 12” x 8 3/4” (32 cm X 31 cm X 22 cm)	
Weight	24 lb. (10.9 kg)	26 lb. (11.8 kg)
Input Power Connection*	1 phase 220-230V, 50/60 Hz @ 5A 1 phase 110-120V, 50/60 Hz @ 10A * Specify input voltage when ordering.	
Stud Material	Mild steel, stainless steel, aluminum, brass, copper, Ni-based superalloys, titanium	
Guns	NCD+ contact gun, NCD+ auto gap gun	
Ingress Protection Rating	IP23 (outdoor operation)	
Safety Standard Compliance	ANSI/IEC/EN 60974-1	
EMC Compliance	ANSI/IEC/EN 60974-10 (CE Model Only)	
Idle Power (W)	25 or Less	
Efficiency	60%	
Display	Full Color TFT, LED backlit	







USA
7900 West Ridge Road
Elyria, OH 44036-2019
Telephone: 800.635.9353
Fax: 440.329.0526
www.NelsonStudWelding.com

Germany
Phone: 49.2332.661.0

China
Phone: 86.22.26371514

France
Phone: 33.1.34.11.94.00

Canada & Mexico
Phone: 800.635.9353

Italy
Phone: 39.11.6059230

Great Britain
Phone: 44.1296.433500

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