



*The Dawn of the New Era
in Portable Stud Welding*

N550c Arc Charger™

Breakthrough Charger design provides powerful 550A arc welder... from a 120V wall outlet!

The N550c Arc Charger™ is the first of a revolutionary new class of stud welding power sources developed around Nelson's patent pending Arc Charger™ platform. The N550c Arc Charger™ has the capacity to weld the full range of drawn arc studs, up to 3/8" pitch (M8) diameter, with an ultra-smooth high-speed switching welding arc, while requiring power from just a standard household 120V wall outlet! This breakthrough combination enables high-strength drawn arc stud welding in just about any location, without the need for high-voltage, industrial 3-phase power, or a large generator!

- **Exclusive Input Charger System.** Input energy is efficiently drawn from a standard 120V wall outlet, and stored in a durable, high-capacity, electrical storage system. The user can even adjust the rate of this energy draw, allowing an Arc Charger™ to share a single wall outlet with other devices.
- **Advanced, High-Performance, Drawn Arc Welding.** Stored energy is precisely delivered to the weld by an advanced digitally-controlled, switch-mode welding power supply. This provides consistent, smooth arc control for drawn arc, gas arc, and short cycle processes with all weldable metals.
- **Advanced Microprocessor Control.** The Arc Charger's 32-bit microprocessor monitors both charging current input from the wall, it's smooth welding arc, and provides a long list of helpful setup and diagnostic features.
- **Stud Expert™.** Makes weld setup quick and easy. Just input your stud diameter and metal, and Stud Expert automatically selects the right settings for you.
- **Multifunction User Key Pad / Display.** The Arc Charger's versatile key pad makes setup easy, with preset buttons provided to save favorite settings. The alphanumeric display shows settings, actual weld results, as well as diagnostic error codes to help with troubleshooting.
- **Portable.** At just 86 pounds, this machine is easy to move around. Use the standard wheel set and it gets even easier! The standard wheel set can be easily removed, or reinstalled, as needed.
- **Compatible with Existing Nelson Equipment.** The Arc Charger™ is compatible with guns, cables and other accessories from Nelson.
- **Safer.** No comparable drawn arc stud welder can run on 120V input power. Lower input voltage means less risk of electric shock or arc flash injury when connecting, handling, or working near the input power cord.
- **Low Cost Input Power.** No need to add costly new building wiring to your facility. Also, no need to hire an electrician to connect, disconnect, or move input power wiring to an Arc Charger™.
- **Assembly Quality.** Built in the U.S.A., to the demanding standards of ISO9001.

ArcCharger™
N550c

Technical Data

ArcCharger[™]
N550c



Specifications		N550c Arc Charger [™]	N550c Arc Charger SC [™]
Input Voltage (V)		120	
Input Current (A)		3 to 15, User Adjustable	
Input Line Frequency (Hz)		60	
Weight (welder only)		86 lbs (39 kg)	
Dimensions (L x W x H)		28.0" x 11.3" x 17.9" (711mm x 287mm x 455mm)	
Weld Rates	3/8" Pitch	6 studs/min	12 studs/min (Short Cycle Only)
	3/16"	15 studs/min	20 studs/min (Short Cycle Only)
Maximum Stud Diameter	Steel/Stainless	3/8" Pitch	
	Aluminum	3/8" Pitch	
Max Weld Settings & Rates (current, time @ rate)		550A, 320ms @ 6 studs/min	550A, 320ms @ 6 studs/min 800A, 200ms @ 6 studs/min 1000A, 100ms @ 10 studs/min 1100A, 90ms @ 10 studs/min 1200A, 80ms @ 10 studs/min 1300A, 70ms @ 11 studs/min 1400A, 60ms @ 11 studs/min 1500A, 50ms @ 12 studs/min
Power Cord		9 ft (2.75 m)	
Input Power Connection*		Standard 120VAC, 3-Prong, Grounded	
Idle Power (W)		25 Max	
Display		Touch Pad w/ Graphical Diagnostics	

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