



Nelweld[®] N800i[™]

Third generation inverter technology propels stud welding into the 21st century

This new, dependable, light-weight and compact stud welder is not light in power and precision. It can deliver up to 800 amps for 1/2" (12mm) full base diameter stud welding. The friendly user interface has 10* preset buttons, bright alpha-numeric displays, graphic gun, and weld quality indicator. Its simplicity reduces set-up time, operator training, and error. Precision control at 60,000 Hz frequency ensures the most stable arc, accurate heat input and highest quality welding process. The features and benefits include:

- **Energy Efficient** inverter saves hundreds to thousands of dollars/euros from old thyristor designs
- **Weld Monitor[™]** built-in arc energy watchdog to detect bad welds from actual process signals
- **Gun Monitor[™]** built-in gun watchdog to match gun speed and adaptively compensate for gun wear
- **Cable Monitor[™]** built-in cable and connector watchdog to detect cable wear and loose connector
- **Stud Expert[™]** choose setting from stud diameter and can be re-programmed by user spreadsheet
- **Pulse Waveform** reduces heat input, cuts surface contaminants and stiffens arc for out-of-position welds
- **Plunge Current[™]** saves electricity, reduces cable wear, and maintains arc energy despite gun wear
- **Cold Plunge Prevention[™]** extends arc time when stud plunge is slowed down**
- **Constant Energy[™]** delivers constant heat input despite surface coating, gun lift and flux ball variation
- **Nelware[™]** production weld quality record keeping and arc signals oscilloscope PC software
- **PLC interface** option provides connectivity to robot and PLC with a host of fieldbus networks
- **Chuck Change Indicator** alerts user to perform scheduled preventative maintenance of consumable parts
- **RoHS Compliance** eliminates lead and 5 other hazardous substances to protect the environment

Integrated gas control option allows programmable pre and post flow for aluminum and galvanized sheet welding. The welder carries a 2 year or 1,000,000 weld warranty.

* Extendable to 40 programmable presets to store prequalified weld settings in production.

** For example, when weld spatter gets stuck between the stud and the ferrule.

Applications

- Shipbuilding, industrial, automotive repair and production
- Insulation pins and threaded studs

N800i

Technical Data

12800i

Stud diameter 12 gauge to 1/2" (3-12 mm)

Weld Process Drawn arc, gas arc, and short cycle

Weld Current 50A-800A continuously adjustable

Weld Time 5 – 1000 ms

Weld Rate 3 studs/min @ 1/2" (12.7 mm)
6 studs/min @ 3/8" (10 mm)
12 studs/min @ 1/4" (6 mm)

Dimensions 13" X 10" X 20-1/2"
33 cm X 25 cm X 52 cm

Weight 40 lb (18 kg) without input cord

Input Power* 3 phase 208-230V, 50/60 Hz @ 30A
3 phase 400-460V, 50/60 Hz @ 15A
3 phase 575V, 50/60 Hz @ 15A

Material Steel, stainless steel, aluminum, heat-resistant steel, advanced high strength steel

Gun Light duty pinning gun, standard duty NS-40

Insulation IP23S

Options

* Specify input voltage when ordering.

Input voltages*: 230V, 460V, 575V, and 400V CE

Power connectors: Dinse, Camlok

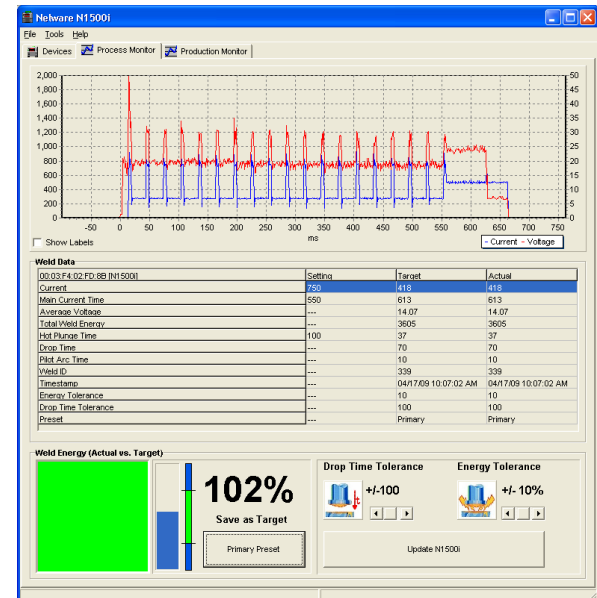
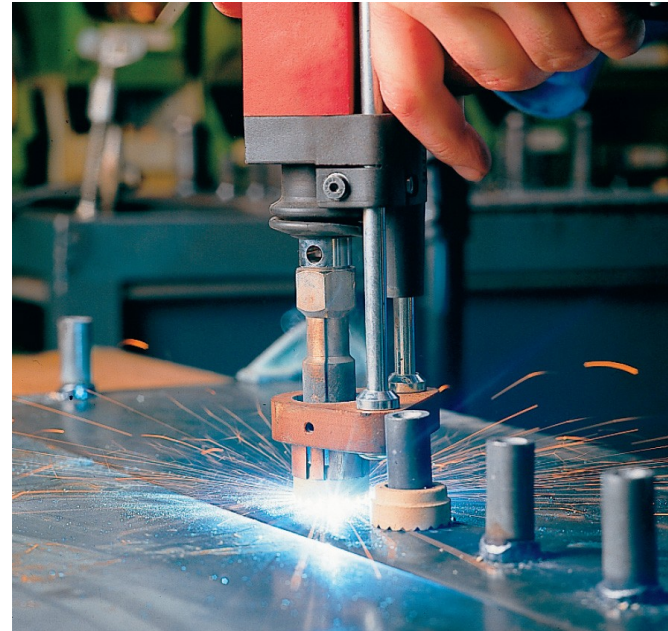
Gun connectors: Hubble, R&S, Binder, Harting

Gas control kit

Nelware™ PC software

Mobility cart

Protective bracket



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