One person portable





Third generation inverter technology propels stud welding into the 21<sup>st</sup> 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 Extendable to 40 programmable presets to store prequalified 1,000,000 weld warranty.

- weld settings in production.
  \*\* For example, when weld spatter gets stuck between the

### **Applications**

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







# 1/2" (12mm) Inverter Stud Welder

Lots of power in a little package

## **Technical Data**

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

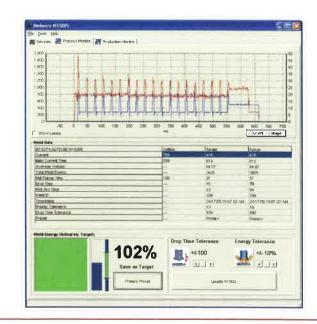
Gas control kit

Nelware™ PC software

Mobility cart

Protective bracket





#### **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







