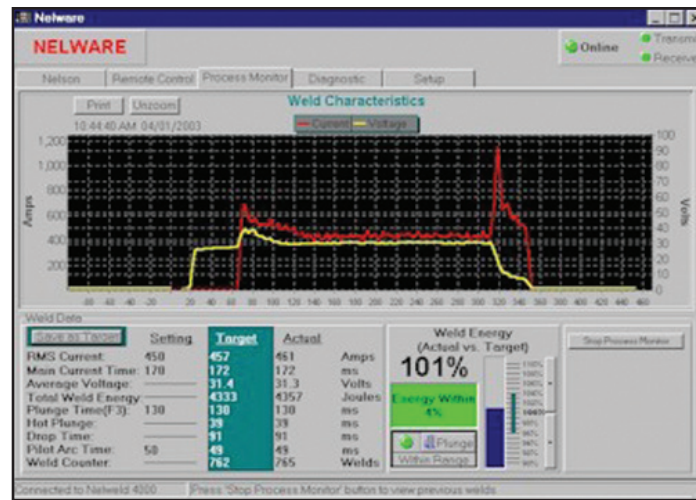


# NELWARE

Following packages available:

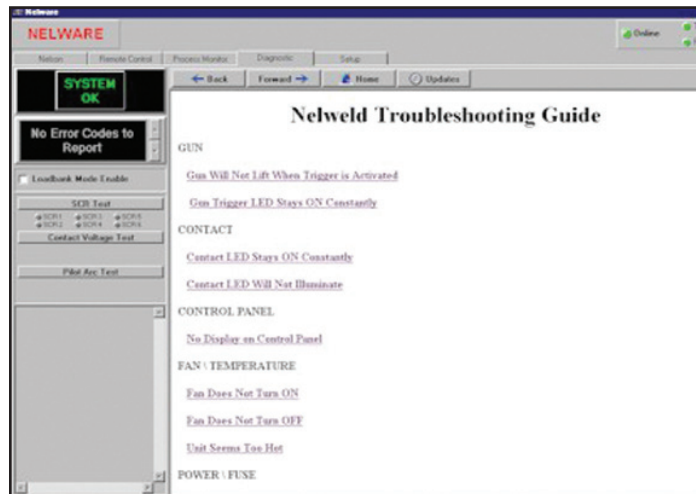
## PROCESS MONITOR

- Graphical representation of each weld.
- Pass/Fail indicator allows operator to verify weld parameters are within acceptable range.
- Archives weld information.
- Various print features include automatic document upon welding failure.



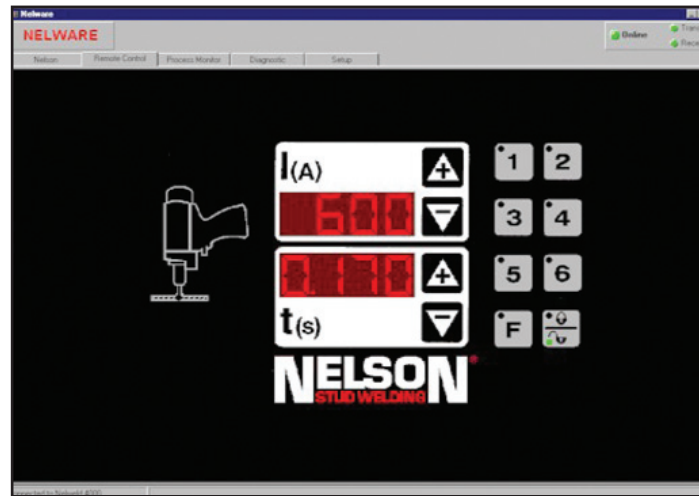
## DIAGNOSTICS

- Detailed description of error codes and their meaning.
- Allows for testing of major components of the power source.



## REMOTE CONTROL

- Extends control functions and display features of Nelweld via remote PC up to 4000 ft.
- Mouse click replaces keypad presses.



## CALIBRATION

- Easy to use method of measuring the weld current and time.
- Includes all hardware required for use.



### Minimum PC Requirements

- One or more RS-232 serial ports
- Windows 95/98/2000/or XP
- A Pentium 200 MHZ or better
- CDROM Drive
- 800 x 600 VGA Display
- 10 mega bytes of free RAM

*The oldest name in stud welding NELSON STUD WELDING INC., continues its leadership role into the 21st century with the introduction of a full line of new drawarc welding systems. The Nelweld line of equipment offers more features, and superior performance, than any other system available.*

Our microprocessor-based systems are proven to be more reliable and repeatable than conventional solidstate systems. And, because the Nelweld systems are based on a modular design, customers can select just the right amount of features and benefits that serve their needs. If those needs change in the future, add on modules can upgrade any system to a higher level of sophistication.

For the most demanding applications, Nelson

engineers can provide a customized software solution, not available anywhere else, which can be downloaded into a customer power source through an RS232 interface port.

Since each Nelweld system can be custom tailored to any application, customers do not need to pay for unwanted features, or struggle with a system that does not quite have the performance features required.

A major feature of the Nelweld products is a unique operator interface. Using simple push buttons, the operator can enter weld parameters for different studs and application conditions. These weld parameters can be stored in memory and recalled with the push of a single button in as many as 6 different pre-sets. Information is displayed in large, bright, digital LED's and panel indicator lights. The "F" function buttons permit custom adjustment or monitoring of as many as 30 different parameters. Should the sys-

tem ever fail to perform to design specification, a series of error codes will tell the operator how to trouble shoot the unit. Nelweld systems have a safety feature that allows the operator to "lock-out" the control module to prevent others from changing the weld parameters.

Nelweld systems have present values from the factory for all weld parameters. If your application is simple and straightforward, the factory settings will produce excellent weld results. Therefore, starting production will be as simple as powering up, select a preset (one button), and begin welding.

How good are our power units? Nelson offers a 2year, or 1,000,000 welds warranty, which ever comes first. This is unprecedented in the stud welding industry, and punctuates our commitment to deliver the very best value to our customers.

## Nelweld®

### Other Features & Benefits

- Fully closed loop, Regulated Current Control, ensures that the proper weld energy is delivered to weld, despite the effects of cable heating, variation incoming primary power, or cable length change.
- Innovative and patented gun circuitry provides for a cooler operating gun, reducing gun maintenance and improving operator comfort.
- Patented two-wire gun control circuitry minimizes downtime normally associated with 3 & 4 wire connector failures, and is more tolerant to wet weather conditions.
- New weld cable connectors on the Nelweld systems have the highest temperature rating available in the industry, which minimizes cable heating.
- Patented operator interface, and Micro-processor based system as described above.
- Thermostatically controlled fan provides on demand cooling, reduced noise, minimum ingestion of dirt and contaminates, and reduced energy costs.
- Modular design allows the customer to upgrade the unit to meet changing conditions instead of purchasing a replacement unit.
- Built-in diagnostics continually self monitor all functions and will display an error code if any portion of the system performance deviates from design specifications. This will assist the operator in determining and correcting the problem.
- Functional handles located at the top four corners of the chassis provide assistance when moving a wheel mounted unit, or serve as lifting points for a hoist.
- A resettable user Weld Counter keeps track of the number of welds in a given production period, and another System Counter records the system's life time welds for warranty purposes.

- A Weld Settings Chart is attached to the front of every unit to assist the operator in the initial weld set-up.

- All systems operate on 3 Phase AC current for a smoother, more stable weld arc, and, most systems have multi-voltage transformer taps for greater versatility.

- Other well known Nelson innovations that are standard on the Nelweld family of units include:

- Weld Thru Deck (Nelweld 6000 only)
- Chuck Saver
- Stud Save
- Thermal Protection / Thermal Shutdown
- Lift Check
- Infinitely Adjustable Time & Current
- Short Cycle Welding Mode
- Stud Stripper

## Factory & Field Installed Options and Kits

### Wheel Kit

Nelweld 4000 – P/N 512-387-000  
Nelweld 5000/6000 – P/N 512-387-001

All power units are shipped with steel legs at the four corners, and can be moved via forklift or hoist. Optional wheel kits are available to maximize portability in a shop environment.

### Gas Valve Control Kit

Nelweld /4000/5000/6000 – P/N 512-387-015

For special applications requiring the addition of an inert shielding gas, an optional gas valve delivery system can be plugged into the gun circuit for automatic on/off operation.

### Automatic Stud Feed Kit

Nelweld4000/5000/6000 – P/N 512-387-040

The optional stud feeder interface kit enables the Nelweld power unit to communicate with an external stud feeding device for high speed, automated applications. With this module the Nelweld unit will generate an output to the feeder, at the conclusion of the weld cycle, to feed another stud.

### Second OutputKit

Nelweld4000 – P/N 512-387-010  
Nelweld 5000/6000 – P/N 512-387-011

The second output kit adds the necessary hardware and controls to allow the user to convert the power unit from a single gun system to a dual gun system. An addition gun and cable set must also be purchased. This capability will improve production rates, and, reduce change over time when welding different studs.

### RS232 Cable

P/N 721-310-009

The RS232 is a serial cable that allows for interface between the Nelweld power unit and a personal computer or laptop. It is required for the demands of critical applications that require process monitoring, machine calibration, or for remote control operation. The cable is also required for computer assisted troubleshooting of the Nelson power unit.

### Remote Control Kit

P/N 512-387-021

This kit allows the use of a computer to emulate the front panel interface to provide remote operation of the Nelweld unit.

### Process Monitoring Kit

P/N 512-387-022

The hardware/software package enables a computer to record and retrieve preset and actual weld parameters of every weld made. This is important for critical applications or conformance to QS9000 & ISO9000 requirements.

### Diagnostic Kit

P/N 512-387-023

This kit consists of hardware and software that will allow a user to use a personal computer or laptop to trouble shoot the power unit in more detail than possible through the operator interface.

### Calibration Kit

P/N 512-387-026

Allows user to calibrate settings.

# Nelweld®

The world's leading Stud Welding Systems technology