

Resistance Welding Diagnostics in a Suitcase

The Portable WeldView® Monitor is designed to monitor any resistance welding application: 50/60 Hz; AC/DC single and three phase; capacitive discharge; inverter power supply; spot, seam, projection, flash/butt welders. NIST-traceable electronics calibration is easily performed with a voltmeter. Current Calibration requires no hardware adjustment.



Benefits

- Benchmark the electrical and mechanical performance of every welding machine.
- Verify the set-up and performance of every welding job.
- Instantly measure the consistency of every weld without performing destructive tests that waste material and slow down production.
- Determine the optimum production heat and time settings without performing multiple destructive tests. •
- Recognize when a shift in the welding process has occurred that requires corrective action.
- Rapidly pinpoint the source of process shift so that the problem can be corrected without incurring unnecessary downtime.

Features

- Monitors half-cycle by half-cycle secondary current and voltage, electrode force, work-piece thickness and displacement, conductance, power and conduction angle.
- Upper and lower limits can be established easily for every half-cycle of each monitored parameter. •
- Notification of out-of-limits condition is made via the graphic display and via a fault signal output.
- Weld data with upper and lower limits are displayed immediately after each weld.
- Weld data are stored digitally in the data archive for SPC purposes or future proof of weld quality. Data can be converted for use in third party spreadsheet applications.
- Acquisition time selectable from 10 microseconds to 10 minutes. Current waveform for machine diagnostics

Specifications

- Half-cycle by half-cycle RMS current with accuracy of +/-1% of the reading (above 500A)
- Current range: 100A-100KA (guaranteed); 50A 300KA (typical).
- Current Waveform, Min/Max Current, Adjustable RMS Current Window, Automatic Range Scaling.
- Half-cycle by half-cycle RMS and Real voltage, -300VDC to +300VDC (configurable)
- Half-cycle by half-cycle Thermal Expansion/Set-down, Force, Current, Voltage, Conductance, and • Power.
- Half-cycle by half-cycle conduction angle.
- Weld Time Range: 0.2s/10us time base (Cap Discharge); 200 Half-Cycles (Spot); 64000 Half-Cycles (Seam).
- Teach functions for setting upper and lower limits for all monitored parameters. •
- Monitors Single/Three Phase 50/60Hz AC/DC; Inverter; Capacitive Discharge.
- Integrated Data Archive stores thousands of welds; waveforms.
- Simple NIST traceable electronics calibration with NIST traceable voltmeter.
- Size: 7.5" h x 20"w x 15.7" d; weight 26 lbs.; power: 115/230VAC 50/60Hz