Dakota NDT
an Elcometer company

ZX6
Multi-Echo Thickness Gauge

HIGHLIGHTS:

- Powered by: 120MHz FPGA timing.
- 150 volt square wave pulser.
- Pulse-Echo (flaw) & Echo-Echo (thru-paint) measurement modes.
- Adjustable gain (40-52dB), in 3dB steps vlow, low, med, high, vhi).
- Time dependent gain (TDG).
- Selectable manual or auto zero.
- Dual element transducers (1-10MHz options).
- USB-C connectivity.
- CDC compatible serial over USB Optional serial RS232 or Bluetooth® module.

DAKOTA ZX6 THICKNESS GAUGE

The ZX6 gauge combines a standard pulse-echo flaw detection measurement mode with a multi-echo through paint mode for use on materials with epoxy based coatings, and eliminate the error from the coating without having to remove it. The ZX6 is equipped with adjustable gain, as well as auto Time Dependent Gain in both measurement modes. Our 5 year limited warranty indicates how we feel about the durability and reliablity of the ZX6 Gauge.

SPECIFICATIONS

PHYSICAL

Weight:
11 ounces (with batteries).

Size:
Width (2.5 in / 63.5mm)
Height (5.17 in / 131.3mm)
Depth (1.24 in / 31.5mm)

Operating Temperature:
-22 to 167°F (-30 to 75°C).

Case:
Extruded aluminum body with nickel-plated aluminum end caps (gasket sealed).

KEYPAD

Sealed membrane that is resistant to both water and petroleum products.
Nine tactile-feedback keys.

TRANSDUCER

Dual-element (transmit and receive).

1 to 10MHz frequency range. Locking quick disconnect LEMO connectors.

4 foot cable.

Custom transducers available for special applications.

CERTIFICATION

Factory calibration traceable to NIST & MIL-STD-45662A.

WARRANTY

5 year limited.

MEASURING

Pulse-Echo (P-E):
0.025 to 36.00 in (0.63 to 914.4mm).

Echo-Echo (E-E):
0.100 to 6.00 in base metal, and coating 0.001to 0.075 in (0.0254 to 1.905mm).

Range dependent on material and transducer type.

Units: English & Metric

Resolution:
0.001 inches (0.01mm)

Velocity Range:
0.0120 to .7300 in/µs
(305 to 18,542 m/sec)

PRF: 200Hz

Display Update Rate: 10Hz

Gain: 40-52dB range in 3dB steps.

Time Dependent Gain (TDG):
Used in both pulse-echo (P-E) and Echo-Echo (E-E) modes depending on transducer and frequency selected.

FEATURES

Zero:
Manual or auto zero option.

Probe Types:
Selectable probe frequency & diameter for improved linearity.

High Speed Scan:
Display the lowest reading found during a scan. Scan speed at 100Hz.

Differential Mode:
Display the +/- difference from a nominal value entered.

Alarm Mode:
High & low alarm limits with audible and visual indicatiors.

VX velocity:
Measure in terms of velocity for nodularity testing.

POWER SOURCE

Two 1.5V alkaline, 1.2V NiCad, or 1.5V Lithium AA cells.

Typically operates for 35 hours on alkaline and 23 hours on NiCad.

Low battery indicator on display. Auto shut-off after 5 minutes of inactivity.

Line power USB-C connected to PC or power adapter.

DISPLAY

Multi-function 7 segment 4.5 digit liquid crystal display with 0.500 in digit height. Two 0.125 in14 segment fields for labels and values, and one 7 segment field for labels and values. Additional icons to indicate features and modes.

Backlight is selectable on/off/auto, and selectable brightness (Lo, Med, Hi) options.

Bar graph indicates stability of reading.

SOFTWARE

No software required, comma separated file type (.csv).

REPLACEMENT

ZX6 replaces ZX-6

CE UKCA

MADE IN THE USA

Dakota NDT
an Elcometer company

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