

Digital Ultrasonic Single Rail Tester

RailScan-100

- ★ Light Weight.
- ★ Provision of probe mounting for Field face checking.
- ★ Bi-Direction positional sensor for track length/position measurement.
- ★ In built Bi-Direction length/position display.
- ★ 10 Memory location to store set-ups.
- ★ Same Battery type for Multiplexer and Ultrasonic Flaw Detector for interchangeability.

RDSO Approved (Specification No.M&C/NDT/128/2007,Rev.-1)



TECHNICAL SPECIFICATION

Ultrasonic Flaw Detector

Test Range	:	10 mm to 5 meter (in steel) adjustable in 1 mm .
Velocity	:	1000 m/s to 9999 m/s adjustable in 1 m/s .
Delay	:	Up to 3 meter adjustable in 0.5mm or 5mm step.
Gain	:	80 dB calibrated gain in adjustable in 0.5,1,2,6,12 or 20 dB step.
Rejection	:	0 to 100% FSH with LED indicator.
Rectification	:	Fullwave rectified with filtering.
Frequency	:	0.5 MHz to 10 MHz (Wideband).
Test Modes	:	Pulse echo and transmit/receive.
Connectors	:	BNC .
Monitor	:	Dual gate adjustable in 1% of Screen width with Positive/Negative logic, Gate Expand modes.
Gate Expand	:	Expands Range to width of the gate.
A-Scan memory	:	200 Trace Patterns can be stored, recalled, print or transferred to PC via RS-232 serial port.
Calibration Set-up	:	Total 20 Calibration set-ups can be Stored and Recalled
Probe	:	Complete set of probes are provided for the Rail examination.
Software	:	RailSoft-100 Interface software for transferring A-Scan from "RailScan-100" to PC is supplied.
Printer Attachment	:	Any PC Printer with serial port can be attached for instant print-out of Trace Pattern(A-Scan with Set-up data).
Display	:	High brightness colour TFT LCD display. Display area 119x89 mm (320x240 pixel). Eleven different colour scheme options.
Peak Freeze	:	Peak freeze it holds echo dynamic pattern which is useful during angle beam probing to locate peak signal.
Full Screen	:	By pressing Zoom key A-Scan can be displayed in Full Screen area.
Reference A-Scan	:	Reference A-Scan pattern of standard test object can saved and recalled in the background for easy comparison during testing.
DAC	:	DAC curve can be Digitally plotted on screen. DAC curve can be set as flaw monitor gate.
Digital Readout And Trig. Function	:	Thickness/Depth can be displayed in digital readout when using a normal probe and Beam path, Surface Distance and Depth are directly displayed when angle probe is in use.
Power	:	Lithium-Ion Battery pack 14.4VDC,4AH, gives 8 hours continuous operation from fully charged battery. Full charging is done within 4 ½ hours.
Charger	:	Input Voltage 100 to 240 VAC. Charge status indicator is provided.
Temperature	:	0 to 55° C.
Size	:	154 x 255 x 68 mm (HxWxD).
Weight	:	2.3 Kgs. with Battery.

TROLLEY

Probe arrangement	: Central forward/Backward, Gauge face forward Backward, Field face forward/Backward and Split crystal normal probe mounting arrangement.
Equipment Mounting	: Main Ultrasonic flaw detector and Multiplexer mounting arrangement.
Water container	: 10 Liter water container with separate valve to control water flow for each probe pair to optimize water consumption.
Odometer	: Bi-Directional positional encoder to measure track length/position for test report. (It will take care of reverse movement also).
Dimensions	: 83x20x66 CM (HxWxL).
Weight	: 21.50 KG With Maux & UFD.

MULTIPLEXER

No of Channel	: 8 separate channel with individual adjustment of delay and gain control.
Display	: LCD Display 16 * 2 Alphanumeric for indication of parameter value.
Gain	: Adjustment from -10dB to 30dB in step of 1db increment for each channel.
Delay	: Adjustment from 0 to 99mm in step of 1mm increment for each channel.
Memory	: 10 calibration set-up can be store/recall.
Operating Mode	: Factory set T+R / T-R internally selected.
Channel Status Indication	: 8 LED's for indication of on/off status of channel.
Keyboard	: Sealed membrane keyboard with direct access key for channel selection.
Battery	: Li-Ion battery pack 14.4VDC, 4Ah, gives 8 hours continuous operation from fully charged battery. Full charging is done within 4.5 hours.
Operating temperature	: 0 to 55 C.
Dimensions	: 154 x 255 x 68(HxWxD).
Weight	: 1.8 KG.

(Modification rights reserved, Color scheme may be change)

Manufactured and Marketed by:



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