

# DIGITAL ULTRASONIC WELD TESTER

## DIGISCAN DS-322AT

Approved by Research Designs & Standards Organisation (RDSO)  
Government of India - Ministry of Railways



### FEATURES

- Capable of detection of flaws in Alumino-Thermic (AT), Flash - Butt (FB) and Gas Pressure welded rail joints.
- Measure the flaw location in welded joints.
- Capable to store 200 'A' Scan flaw patterns & 100 calibration parameter sets.
- Colour TFT signal display.
- Special facility to display, freeze & store vertical & horizontal movement of flaw signal pattern of angle probe.
- Facility to obtain printout of stored data & transfer to laptop / PC.
- Facility to label and store data.
- Light weight, robust, sturdy & portable

# SPECIFICATIONS

## LCD DISPLAY

Viewing Area	117.2 mm (W) x 84 mm (H)
LCD Pixel Density	320 x RGB (H) x 240 (V)
Display Type	TFT Colour LCD with CFL backlight
Display Freeze	Current display frozen
Active Freeze	Display accumulation
Reference Pattern Display	Reference pattern can be displayed at the background from selected location in memory
Display Pattern	Envelope or filled

## PULSER / RECEIVER

Gain	Variable 0-80dB, selectable -in steps of 0.1, 0.5, 1, 2, 6, 12dB (Total Gain 120dB)
Rejection	Linear type (0 - 99%), 1% step
Operating Mode	Single probe, Double probe, T-R mode
Test Mode	Pulse reflection or pulse Transmission
Pulse Power	At Energy High, 260 V Rise time 9 ns
Energy	4 Energy levels. 1, 2, 3, 4
Damping	HI/LOW (150 / 1K)
Echo Display	Full wave rectified
Probe Connector	BNC type

## TIME BASE

Range	10 mm min. 1000 mm max (@ 5890 m/sec)
Delay	500 mm continuous variable
PRF	Variable from 100 Hz. 1000 Hz in 100 Hz step manually Auto limiting for set parameters

## GENERAL

Trigonometric Functions	Beam path, Flaw depth & projection distance
Measurement Units	Millimeter
Memory	- 200 'A' scans memory with calibration parameters, trigonometric values and label (ID tag) - 100 calibration parameter sets
Interface	Standard printer interface (Dot Matrix LX-300+) and PC Connectivity via RS-232
PC Software	EECOWIN PC interface software can upload current "Frame" or from saved set to PC through the RS-232 serial port
Keyboard	User friendly with direct access to frequently used functions
Colour	Selectable background / Trace colours
Dimensions	243 (L) x 56 (W) x 195 (H)
Weight	2.4 Kg
Power Source	Built-in battery pack, Li-ion rechargeable battery. Model BAT-322L Operating time upto 8 hrs with battery
Battery Indicator	Battery status indicator with auto shut down
Charge Indicator	Green LED for charging
Operating Temperature	0° C - 55° C