

SPECIFICATIONS FOR MEDIUM RANGE ULTRASONIC TESTING (MRUT) EQUIPMENT

Sl. No.	MAIN UNIT	
1	MRUT Scanning	Both Axial & Circumferential
2	Length of Scanning	2.5 metre (Minimum) on both sides of the sensor
3	Dead Zone	5 inch or lower
4	Resolution	1 inch or better in axial direction
5	OD for Scanning	1 inch or higher
6	Maximum Thickness for Scanning	Upto 1 inch (25 mm)
7	Ultrasonic Testing Channels	1 No. (Minimum)
8	Inspection Speed	1 inch/s or better
6	Bandwidth	Up to 5 MHz or better
7	Pulse Repetition Rate	Up to 250 Hz or better
8	Scanning Mode	Pulse Echo and Pitch-Catch
9	Rectification	Full Wave, Half Wave and RF
10	Gate	2 Nos. (Min)
11	Power Input	240 V AC 50Hz
13	Battery Life	3 Hours Min.

OTHER ACCESSORIES FOR MRUT SYSTEM

Sl. No.	Equipment	Quantity
1	MRUT Scanners for Lamb Waves Generation.	1 No.
2	MRUT Scanner for Shear-Horizontal Waves Generation	1 No.
3	MRUT MS Pipe Scanner for pipe inspection	1 No.
4	EMAT sensors for lamb wave and SH wave detection	1 No.
5	Magnetic sensor with wheels for ferromagnetic material	1 No.
6	Magnetostrictive System with accessories for Non-Ferrous material inspection.	1 No.
7	MRUT Software for Magnetostrictive application	1 No.
8	Necessary Consumables for operation of the system	1 Set

The complete system must be capable to inspect the following:

Axial and circumferential inspection of pipes, including light-coated freestanding pipes and corrosion under non-welded pipe supports, plate and tank volumetric inspection, corrosion under pipe insulation, corrosion detection on inaccessible areas.

Other Details:

Equipment must be IP66 protected.

WARRANTY: 12 Months from the date of installation.

Demonstration of the system and Operational Training at CSIR-CMERI, Durgapur.

Operation/maintenance manual must be given along with the system.

Turnaround time for service support issues: 72 hrs.

S. Chandra
07/01/2021

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