# MIT-SCAN-T2

Non-Destructive Thickness Measurement Device



## **INSTRUMENT CAPABILITIES**

□ Can measure to a depth of 460 mm (18 inches)

❑ Accuracy: ±[(0.5% of measured value in mm) + 1 mm]
> ±3.3 mm for 460 mm (18 inches) thick pavement

□ Battery life: 8 Hrs. or 1,000 measurements

□ Charging time: Zero to Full in 1.5 Hrs.

□ Instrument weight with battery: 3 Kg (6.7 lb)

## **OPERATING PRINCIPLE**

Magnetic Imaging Tomography

Device generates magnetic field

- 4 sensors detect alterations caused by nearby metal objects
- Magnetic reflectors are placed on base layer prior to placement of PCCP



#### SELECTION OF REFLECTOR DISCS

Zinc clad steel discs used as magnetic reflectors

Selection based on designed layer thickness

Disc A: Diameter: 70 mm Thickness: 0.6 mm



Disc B: Diameter: 300 mm Thickness: 0.6 mm

Design Pavement Thickness	Disc Diameter	Identifier	Calibration File		
0 - 180 mm (0 to 7 in)	70 mm (2.7 in)	Disc A	MIT-R07		
181 - 460 mm (7 - 18 in)	300 mm (11.8 in)	Disc B	MIT-R30		

#### **REQUIRED CLEARANCES**





## PLACEMENT OF REFLECTOR DISCS

□ Identify reflector disc type and placement location

Place and secure reflector disc to base using PK nails or other fastening method



#### MEASUREMENT OF SLAB THICKNESS

- □ Ensure proper clearance from metal objects
- □ Power up MIT-SCAN-T2; select appropriate configuration file.
- Place MIT-SCAN-T2 about 300 mm (1 ft) in front of reflector disc

Roll over reflector disc at slow and steady pace until beep sounds

### RESULT

Layer thickness is immediately displayed on screen in SI units

ScanT software can be used to retrieve stored data from MIT-SCAN-T2 onto a computer in text format.

The text file generated by ScanT can be imported into MS Excel

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