

DIGITAL POINT LOAD TESTER

BE 77

A Digital Point Load Tester is a specialized geotechnical testing instrument used primarily in rock mechanics to measure the point load strength index (I_s) of rock specimens. This non-destructive or semi-destructive test helps evaluate the tensile and shear strength of rocks quickly, both in the field (e.g., on core samples from drilling) and in laboratory settings. It's widely applied in mining, civil engineering, and geological assessments to classify rock quality and predict material behavior under stress.

FOLLOWING STANDARD

IS 8764, ASTM D5731

KEY FEATURES OF DIGITAL MODELS

Digital versions offer higher precision compared to analog (hydraulic gauge) testers, with features like

- **Load Measurement:** High-precision electric load cells or pressure transducers with digital displays (resolution as fine as 0.001 kN).
- **Capacity:** Typically 55–100 kN, suitable for specimens up to 4 inches (101.6 mm) in diameter.
- **Portability:** Often supplied in a carrying case with an integrated hydraulic jack, frame, and scale for measuring specimen dimensions.
- **Readout:** Real-time digital monitoring of load and distance, with low linearity error (e.g., 0.05%) and repeatability (e.g., 0.02%).

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