

GCTS is committed to designing accurate testing systems by integrating innovative software engineering with advanced hardware. GCTS systems perform at the highest levels of reliability, providing efficient systems that satisfy customer needs and expectations.

▶ **PLT-100 & PLT-110**
Point Load Test System



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- **Compact, Light Aluminum Construction**
- **100 kN Load Capacity**
- **Precise Digital Display with Peak Value Memory**
- **User Selectable display units (PLT-100 only)**
- **DC Signal Output to a Computer or Datalogger**
- **Optional A/D Automatic Data Acquisition with USB interface**
- **Windows 98/NT/2000/XP Software for Fast and Automatic Testing**
- **Available Ultrasonic Velocity Option**
- **110/220 VAC and 12 VDC Operation (PLT-100)**
- **Internal Battery Powered with Automatic Light-Actuated Battery-Saver Circuit (PLT-110)**

DESCRIPTION

Point load test is carried out on core rock specimens or irregular rock fragments to obtain the point load strength index and unconfined compressive strength. This test does not require costly specimen preparation and is a quick simple test. The failure load P and the distance between platens D are measured to obtain the uncorrected point load strength P/D^2 . A correction is applied to account for the specimen size and shape, and the unconfined compressive strength is obtained from a correlation equation. Depending on the specimen geometry, three types of tests can be performed: diametral, axial, and irregular lump.

The GCTS Point Load Tester is an apparatus made of high-strength anodized-aluminum that incorporates digital technology to increase precision and ease of use while reducing its size and weight. The apparatus weighs less than 14 kg. The standard unit can apply loads up to 100 kN (22.5 kips). The introduction of a pressure sensor to measure load provides a better accuracy at any load level eliminating the imprecision of traditional pressure gauges at low load ranges. The system has a digital display that

