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## Automatic CBR Test Apparatus ZI 3067

Standards:EN 13286-47; BS 1377:4; ASTM D1883; AASHTO T193; NF P94-078; UNI CNR 10009

Specification:

The **Automatic CBR Test Machine** is designed for performing laboratory evaluation of the CBR value of highway subbases and sub-grade, and determination of the strength of cohesive materials which have maximum particle sizes less than 19 mm (3/4"). This CBR apparatus is composed of a robust and compact two column frame with adjustable upper crossbeam driven by an electromechanical ram with a maximum capacity of 50 kn and a data acquisition and processing system.

The machine is designed to load the penetration piston into the soil sample at a constant rate to measure the applied load and piston penetration at predetermined intervals. The ram speed can be set between 0.5 mm/min to 5

mm/min by using the digital readout unit. This main feature allows the user to perform tests complying to BS, EN, ASTM or AASHTO standards with the same machine.

Rapid adjustment of the platen is also provided by up and down buttons which are located on the front panel of the machine. The machine is supplied complete with a 50 kN load cell, penetration piston, linear potentiometric displacement transducer (25 mm x 0.001 mm), computer software and connection cable. PC is optional.



Main Features:

- Calculates corrected CBR value at 2.5 and 5 mm the digital unit saves the load value at user defined displacement values such as 0.625, 1.25, 1.875, 2.5, 3.75, 5, 7.5,10, 12.5 mm
- The load corresponds to the displacements corrected respect to the linear region of the data has also saved
- The % CBR at 2.5 mm and % CBR at 5 mm is also automatically calculated and saved
- Can make test with displacement and limited load control.
- Real time display of test graph.
- CPU card with 32-bit arm RISC architecture
- Permanent storage capacity up to 10000 test results
- 4 analog channels, 2 channels are active for CBR
- 1/256000 points resolution per channel
- 10 data per second sample rate for each channel
- Ethernet connecting for computer interface
- 800x480 resolution 65535 color TFT-LCD industrial touchscreen
- 4 main function keys
- Multi-language support
- 3 different unit system selection; kn, ton and lb
- Real-time clock and date
- Test result visualization and memory management interface
- Remote connection through ethernet
- USB flash disc for importing test results and for firmware
- USB printer support for inkjet and laser printers(ask for compatible models)
- Camera support for real-time video recording during test(ask for compatible models)
- Free of charge PC software for the test control and advanced report generation

The CBR test machine is supplied complete with:

- Load cell, 50 kN
- Penetration piston
- Linear potentiometric displacement transducer with connection part, 25x0.001 mm
- Computer software
- Connection cable
- Advanced report generation

Dimensions : 480 x 650 x 1150 mm Weight (approx.) : 110 Kg Power : 370 W