

S D INSTRUMENTATION Ltd

CLEGG IMPACT SOIL TESTER TYPE CIST/883 – 20 Kg

Ruggedly Designed Tool for Checking Trench Re-instatement, Soil Strength & Establishing Clegg Hammer Modulus (CHM)

The 20 Kg Clegg Impact Soil Tester manufactured by SDi is pictured below. This model is designed for use on hard materials such as those employed in roadworks.



Here the tester may be used in obtaining data for estimating the traffic carrying potential of lightly surfaced low traffic roads.

The Clegg Test involves dropping the hammer mass 5 times at each location and the 4th reading is used as the measurement of interest.

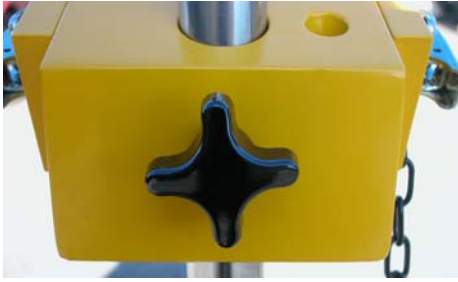
The Surface Modulus of the flexible pavement is measured in terms of Mega Pascals and calculated as per Dr Baden Clegg's original work 'in the field'. The measurement Clegg Modulus or CHM is displayed on the readout unit after the 5th hammer drop. Time and date stamped data logging of site tests and wireless transfer to PC is provided by the CIST/883 Readout Unit.

The hammer has a mass of 20 Kg and a diameter of 130 mm. To simplify carriage and handling, the Guide Tube tube is fitted with wheels, making it into a pull-along cart.

If required an optional 10 Kg hammer mass can be provided instead of the 20 Kg hammer.

The Readout is fixed to an adjustable mount that can be moved in height and rotation to suit the user.

CIST/883 20 Kg Information Pictures:



User Adjustable Readout Mount provides height and orientation adjustment for the readout unit.



Readout Unit is securely clipped to the Adjustable Readout .



20 Kg Hammer supported by Support Pin during transit.



Clegg Hammer Modulus Display
144 MPa Example from Readout LCD.



Readout Unit operates from two standard 'AA' size Alkaline, NiMH or Lithium type batteries.



Specification and Ordering Code:

CIST/883 Specification:-

Order Code:- CIST/883/20K/Stor/Blu

Model Number (20 Kg & 10 Kg)	: CIST/883/20K/Stor/Blu. (20 Kg) or CIST/883/10K/Stor/Blu. (10 Kg).
Items Supplied	: 20 Kg Hammer & T Handle, Guide Tube Assembly, CIST/883 Readout with Bluetooth™, Hammer to Readout Cable, Test Ring, SDi Software for Microsoft Windows PC Bluetooth™ USB Adapter, Operating Manual & Calibration Certificate.
Readout Display (<i>alphanumeric</i>)	: Vertical display with readout unit clamped to Adjustable Mount – Easily viewed.
Readout Range	: Up to 101 Impact Values (IV).
On Site Confidence Check	: Check Ring provided giving typical 22 IV Test Reading - Indicates Operation OK.
Power Source	: Low power 3V operation: Two 'AA' Cells, type Alkaline, NiMH or Lithium located in battery holder at base of readout, sealed to IP67. 12 month typical battery life.
Battery Level	: Displayed at switch-on.
Power 'On' & Controls	: Single push button. Auto switch off after 5 minutes from last reading.
Data Storage in Readout	: Flash Memory for up to 10,000 5-drop test readings. Each field contains the 5 drop IV readings, time & date of each test, TREND result validity pass/fail flag & CHM.
Data Transfer Method	: Bluetooth™ Wireless data transfer. No cables & hence hassle free connection to Windows XP PC or laptop. (Bluetooth™ USB Adapter for PC is provided).
Data Type when Transferred	: Comma Separated Variable (CSV) data for manipulation in third party packages such as Excel™. Up to 10,000 x 5-drop test storage & output.
Readout Displaying CHM	: Software Selectable Clegg Hammer Modulus display from Readout LCD.
Readout Q. A. Firmware	: Software Selectable TREND Algorithm checks inter-IV readings & Readout advises user if surface being tested has failed (Readout displays 'ABORT').
System Software	: PC Software provided from SDi to facilitate data transfer, real time test view, time/date setting and configuration set-up. Very easy to use.
Transit / Storage Case	: Type CIST/20/WTS/09. Wooden case for storage and protection in transit.
Size & Weight (approx).	: 123 x 41 x 41 cm. Instrument weight 30 Kg. Packed weight in case 50 Kg.

