

CIST 883-4.5kg SDI Impact Soil Tester



The 4.5 Kg CIST / 883 Clegg is produced by SDI (SD Instrumentation) and provides a simple and straightforward method of measuring and controlling soil strength and consolidation levels during the ditch recovery.883 The reading screen is clamped to the catheter and can be seen at the top during use. Single push-button program operation design, quite easy to use.

- ◆ A 4.5 Kg standard impact hammer
- ◆ The Impact Value (IV) readings are stored in the memory card
- ◆ Bluetooth downloads the stored data
- ◆ With the %CBR calculation function, setting the reader displays the %CBR value
- ◆ Includes software and related aids
- ◆ Includes carrying cases
- ◆ Usage is easy to use

Data recording performance

Onboard data recording and data storage via wireless data transmission devices are features provided by the CIST / 883 instrument. Users can wireless use the accompanying PC software to download their test results from the site to the PC. This wireless operation greatly improves the reliability of the system when compared to wired systems.

Use

The instrument is used to determine the uniform compaction of the ground in large areas and to identify areas with low compaction and substances that cannot be rolled.

Strong design

The CIST / 883 Clegg Impact Soil Tester is very firmly designed for long-term use in wet, dirty and harsh conditions. CIST / 883 reader are made of high strength alloy for decades. The CIST / 883 battery case seals up to IP67, is completely customized to 2 AA batteries and lasts for up to 12 months. The CIST / 883 Clegg Impact Soil Tester is a solid and reliable instrument. The whole package includes wooden handling and storage boxes.

Operation principle

The tester includes a 4.5 kg compaction hammer that works in a vertical catheter. During testing, when the impact instrument is released, the hammer falls along the catheter, hits the ground, and slows down at a rate determined by the stiffness of the material in the impact zone. The reader recorded a deceleration value in an IV (Impact) value. The IV value is an index of soil hardness.

CBR measure

The results of the CBR test showed a good correlation. The data from CIST / 883 can then be applied in a similar manner to the results of the CBR tests performed in the laboratory and in the field. According to Dr. Clegg's initial pioneering study, the CIST / 883 display can directly display the %CBR results. This feature can be selected through the accompanying PC-side

software.

History

After extensive laboratory and outdoor field testing, British Gas introduced the Clegg tester in the UK in 1990. Since then, thousands of such devices have been widely used in the UK and overseas as operators adopt recommended testing procedures.

The tester is introduced in the UK Road and Bridge Design Manual and is approved by the American Materials Testing Association. A standard with the name number 5874 was established in 1995, called "the standard test method for determining soil IV values". The Clegg soil impact tester is designed, manufactured and marketed by S D Instrumentation, UK. Dr. Baden Clegg, the original Australian inventor of the instrument, has an exclusive patent right.

The CIST883 Reader

The reader shows the readings of the IV values while showing the number of drops of the hammer during each test operation. For example, the IV reading value is 25, and the four drops are simultaneously displayed in the reader in the figure on the right.

Perform a test very quickly and directly. Sweep the ground off the soft material with your foot and secure the catheter. During testing, the first reader is installed on the catheter (as shown), and it is very easy to use without the need to catch the reader by hand. The hammer is lifted to a height of 450mm above the ground (indicated at the top of the hammer) and falls free. The procedure is repeated four times and the data recorded for the fourth drop are taken as the final IV value. When the recovery fails, the optional Q.A. (quality assurance) reading firmware in the software can inform the user.

The target IV values for a series of backfill and subgrade materials are designed to be tabulated and printed on the operation manual. Enables the operator to recover the target IV values.

Specification parameters and order code

CIST/883 Specification	Order code:- CIST/883/4.5K/Stor/Blu
model:	CIST/883/4.5K/Stor/Blu
Smaller weight	4.5 Kg
Value display (character number form)	Vertical display, clip on the catheter, with reading units-easy to view
Read the value range	The IV (Impact) value is up to 110
power	Low power supply, 3V, need 2 AA batteries, alkaline battery / nickel-metal hydride battery / nickel-cadmium battery, battery installed in the battery box at the bottom of the reader, sealing level up to IP67. The battery life is usually 12 months.
Battery grade	Note is provided on the open button
Turn on and control	Single button-automatically closed 5 minutes after the last display reading
Data store in the reader	Flash memory for up to 10000 * 5 reads / copy. Each record includes the IV value from 5 drops, time date of each test, and validity of the results (pass / fail)

Data transmission mode	Bluetooth [™] Wireless Data Transfer. No cable, free to connect to a Microsoft computer or laptop.A Bluetooth USB dongle device is provided
Data file type at transfer	CSV file type for third-party software (such as Excel).Maxto store and output 10000 copies of 5 drop per each.
%CBR show value	The CIST / 883 LCD screen can enable %CBR display by software selection.
Quality reader ensures component	TREND operations can be selectively enabled by the software to detect readings between the built-in IV, and will notify the user if the test fails (the reader displays 'ABORT')
system software	SDI company provides PC software for convenient data transmission, real-time test viewing, time and date setting, and configuration and installation.It is very easy to use.
Transportation storage box	CIST / WTS / 09, wooden case, provides additional protection in transport.
Roughly size and weight	71 x 13 x 13 cm□Instrument weight is 6.8 Kg, including the package weight of 12Kg.

Please feel free to contact us if you are interested in this product.