# CIST/883-2.25kg SDI Impact Soil Tester





### Introduce

The 2.25 Kg CIST / 883 Clegg Impact Soil Tester, designed and manufactured by SDI, provides a simple and straightforward way to detect sports field surface hardness conditions. This device consists of a 2.5kg movable reset hammer built into a vertical catheter.

During the test, when the hammer is released, the hammer falls from inside the catheter, hits the test ground, and then begins to slow down, and the deceleration rate is determined by the stiffness of the material in the test area.

When used, the reader is clamped on the catheter and the reading can be seen at the top.Single pushbutton program operation design, quite easy to use.

### **Data recording performance**

The wireless data transfer function of airborne data recording and data storage are the features of this instrument. Users can wirelessly 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.

### Surface test

The 2.25 kg Clegg impact hammer well predicts the ball resilience of the cricket surface and football field. It is also used for inspection of equestrian field surfaces, and instruments are used to confirm uniform surface characteristics in the play area and on the track. The tester provides a fast and accurate method for monitoring intensity changes and helping to determine regional uniformity. Soft surface points or hard surface areas.

# **Operation principle**

The tester consisted of a 2.25kg solid set hammer operated in a vertical catheter.During the test, the hammer was released, which falls from inside the tube, then hits the ground, and then slows down, and the deceleration rate is determined by the stiffness of the ground in the affected area.The reader records hardness values in Gm, and Gm values is an indicator of soil hardness.

## Strong design

The CIST / 883 Clegg Impact Soil Tester has a rugged design for long time use in wet, dirty, and severe environments. The CIST / 883 reader is made of high-strength alloys and has proved to last for decades. The device is powered by 2 AA batteries and generally has a service life of 12 months. The CIST / 883 Clegg Impact Soil Tester packs a wooden box for transportation and storage.

### How to test

Performing a test is very fast and straightforward.Place the catheter vertically on the test ground first.When testing, the digital reader is located on the catheter, without hand-holding, and is simple to use.The impact hammer rises to the position of the white line leaking from the 2.25kg impact hammer (as shown on the right).Then allow the hammer to fall freely.This step will last for three times.The reading reached at the third drop is recorded as the test result.

As shown on the right, the third drop value of 107 Gm is displayed in the reader.

## Test result

Surface stiffness or hardness is related to whether the ball can bounce and roll quickly. Due to the water change, lawn growth and wear during the play season, we can easily monitor the stiffness change.Hardness changes due to moisture changes, grass growth, and surface wear (depending on the

season) can also be easily monitored. The California carrying ratio (%CBR) and the quality assurance algorithm can be enabled to check the effectiveness of the tested surface. Test data is stored in the instrument and can be downloaded wirelessly to the computer via Bluetooth.

### Specifications and order code

CIST/883specifications:	Order code:- CIST/883/2.25K/Stor/Blu
model:	CIST/883/2.25K/Stor/Blu
Hammer heavy	2.25 Kg
Value display (character number form)	The reader carries numerical units, clamped vertically on the catheter and easy to watch
Reading range	The 1 Gm step can display up to 500 gravity (Gm). Up to 500 Gravities (Gm) in 1 Gm steps.
Power	3V Low power supply: 2 "AA" battery packs, located in the battery holder at the bottom of the reader. Sealed up to IP67, usually for 12 months.
Turn on and control	Single button, automatically closed from 5 minutes after the last reading.
Data store in the reader	Storage can store 10000 * 3 drop test readings.Each includes Gm readings of 3 drops, time date of each test, and validity of results (test pass / failure)
Data transmission mode	Bluetooth wireless data transmission, no cable required, freely connected to Microsoft XP or tablet. Provide Bluetooth USB Dongle[]
Data type at transfer	CSV file type, used for operating within third-party software, such as Microsoft Excel <sup>™</sup> .Store and output 9,999 x 3 test values.
Read count shows%CBR	The software can select whether the CIST / 883 LCD displays%CBR or not.
Reader quality ensures the component	In the software, you can choose whether to turn on the TREND operation function, detect the value between Gm, and the reader will inform the user whether the surface test has failed (the reader will display 'ABORT').
System software	SDI provides computer software for easy data transfer, real-time test viewing, time and date setting, and configuration installation.Very easy to use.
Transportation storage box	Model CIST / WTS / 09, wooden boxes can provide additional protection in transport.
Roughly size and weight	71 x 13 x 13 cm. The instrument weighs 4.6 Kg, including the package weight of 10Kg.
quality guarantee period	12 Months