Illinois – Flexibility Index Tester (I-FIT) by Testquip

- Portable weighs 200 lbs
- Runs from a 120V outlet
- Immediately prints and plots test summary
- Includes ICT software for determining Flexibility Index (FI)





Mechanical Configuration

The I-FIT machine is completely contained on a rolling portable test frame that is approximately $31.5^{\prime\prime}$ L x $20^{\prime\prime}$ D x $34^{\prime\prime}$ H. The fixture is designed to apply load to a Semi-Circular Beam (SCB) specimen through a pivoting head and roller bearing pins. The system is designed to meet the most current standard for TP105 Illinois.

Servo Hydraulic Actuator

The system includes a 4500lbf actuator with low friction seals. It utilizes closed loop feedback from the load cell and magneto restrictive position sensors for stroke and load line displacement (LLD).

Hydraulic Pump

A 1 GPM pump runs on 120VAC. It requires a 15A outlet

Load Line Displacement Measurement

The LLD position sensor utilizes a non-contacting method to measures displacement of SCB specimen at the loading head.

Controls and Software

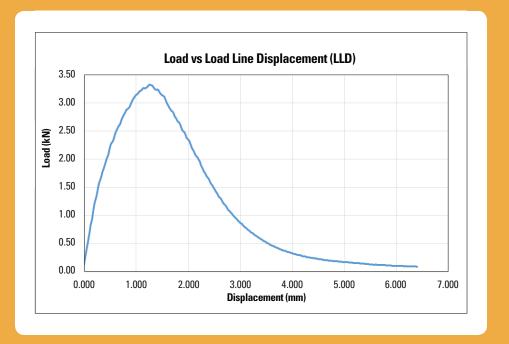
It includes a custom program for I-FIT test operation. Every test has a text data file created for easy to use post processing as well as printouts from the test during operation. In addition, a Multi Test Language (MTL) compiler is provided to allow the user to create custom programs or modify custom programs and store as a callable application.



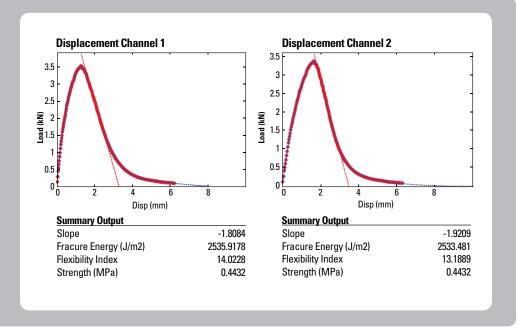
System Performance

Test Results

The user gets an immediate view of the data when the test completes.



Test data is formatted and saved to an output file compatible with Illinois Center for Transportation (ICT) post processing software. The ICT software provides fracture energy and flexibility index calculations.



Join the other cutting edge users of the Testquip I-FIT machine for designing pavements that use RAP, and to meet cracking performance requirements necessary in your state!

As always, Testquip guarantees a 24hr response on any service issues!

Contact Testquip for more information or references.

Testquip LLC 763-600-6540 612-308-8376 Mobile

