

## FAST AND SIMPLE WAY TO PERFORM YOUR CRACKING AND LOAD TESTING

The InstronTek® **SmartLoader™** is a cost-effective load frame that can perform the latest cracking and monotonic loading tests. The SmartLoader comes preprogrammed to perform the IDEAL-CT, and both the Illinois Flexibility Index (IFIT) and Louisiana State University (LSU) SCB tests. The SmartLoader is uniquely designed to conduct other cracking tests quickly and accurately. Users can select or program the test they would like to perform and the SmartLoader will automatically adjust the test parameters, capture test results and correctly format test data for easy analysis.

The SmartLoader also comes preprogrammed to perform the following tests:

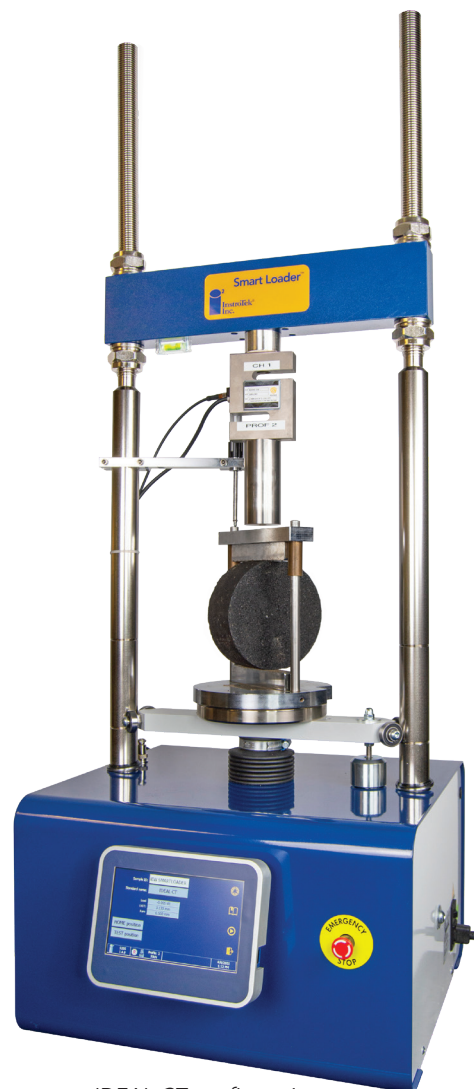
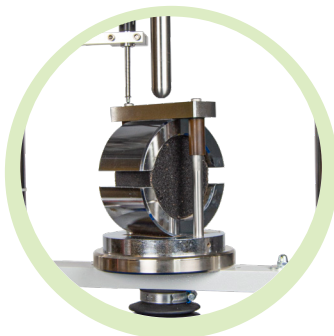
- IDT/TSR
- Marshall
- Direct Shear on Asphalt Interlayers

The highly versatile and automatic SmartLoader can run several performance tests with user-friendly programming features. The touchscreen display, along with the easy-to-use and intuitive controls allow for rapidly setting new test parameters, and monitoring test data in real-time. SmartLoader can operate in load-control and displacement-control modes and can run asphalt performance tests such as IDT strength and IDT creep compliance. The data acquisition system can connect to multiple transducers simultaneously. The frame maintains the specimen alignment during the test, and the durable electromechanical loading system needs minimal maintenance. The Auto\_SCB operates at 110V AC and can be set up at any asphalt lab.

The SmartLoader helps pavement designers and maintenance practitioners accurately predict the cracking potential, performance and ductility of asphalt mixtures at a fraction of the cost of servo-hydraulic systems. The SmartLoader – *The Smart Way To Perform Load Tests!*

### ADVANTAGES

- ▶ Performs **IDEAL\_CT**, **ASTM D8225**, **SCB Test**, **AASHTO TP124 (I-FIT)**, **ASTM D8044 LSU Method**
- ▶ SCB Compatible Test Fixture
- ▶ Color touchscreen display "320 x 240 pixels"
- ▶ 8 analog A/D inputs, for load, displacement, etc.
- ▶ Fully automatic test process with real time acquisition and a graph of load/displacement or load or deformation versus time curve
- ▶ Removable memory capable of storing 1,000s of tests



IDEAL-CT configuration

## SmartLoader™

With automatic load or displacement/deformation control for testing

### ASPHALT:

- SCB
- MARSHALL
- IDT/TSR
- DIRECT SHEAR on asphalt interlayers

### SPECIFICATIONS

|                              |                                             |
|------------------------------|---------------------------------------------|
| Dimensions                   | 500 x 550 x 1675mm (20 x 22 x 66 in)        |
| Weight                       | 130 kg (300 lbs)                            |
| Power Supply                 | 110/120V (220V optional)                    |
| Maximum Compression Capacity | 50kN/11,000 lbs                             |
| Maximum Tension Capacity     | 25kN/5,600 lbs                              |
| Adjustable Testing Speed     | 0.01 to 51 mm/min<br>(0.0004 to 2.0 in/min) |
| Maximum Ram Travel           | 100 mm (4 in)                               |