



*The difference is measurable™*

### **EFFICIENT AND HIGHLY ACCURATE DETERMINATION OF MATERIAL AND COMPONENT PROPERTIES**

At K 2013, Instron® will be showcasing, at its booth J18 in hall 10, highly sophisticated measuring and testing systems for efficient and precise determination of the rheological properties of plastics and evaluation of the behavior of materials and components under static and dynamic loads. Amongst the exhibits will be the melt flow testers CEAST MF50 and the new CEAST MF30 with manual mass selector, a CEAST 9050 pendulum impact tester, and a CEAST 9350 drop weight tester.



Instron will also be presenting automated testing systems, accessories, and software that will help the plastics industry improve the efficiency, repeatability, and accuracy of measurements both in the laboratory and on the shop floor. This includes the new AutoX750 Automatic Contacting Extensometer, the TrendTracker™ software package, and an automated carousel system for tensile testing that features a high-precision measuring system for determining specimen thickness.

The CEAST MF30 and MF50 are part of Instron's new Melt Flow Tester Series. The CEAST MF30 is a single-weight system, designed to determine melt mass-flow rate (MFR) and melt volume rate (MVR) in accordance with ISO 1133-1 and -2, Procedures A, B, C, and ASTM D1238. Its unique and versatile features include a high-resolution digital encoder and an N/C-controlled weight lifter. The lifter is equipped with an integrated load cell for controlled compacting and purging operations, a significant improvement for repeatability and time savings. The Manual Mass Selector – a new integrated option – simplifies configuration and testing, and ensures outstanding operator safety. With minimal physical effort, there is no heavy mass handling required and the configuration of the machine always remains the same.

The CEAST MF50 is the premier Melt Flow Tester for single-weight and multi-weight tests. With outstanding technical features and a higher level of automation, safety, and user-friendliness, it is compliant with the latest international standard requirements for temperature accuracy and stability. During multi-weight tests, the system automatically applies up to five of the eight pre-installed test masses, ranging from 0.325 - 21.6 kg, in any desired sequence. During the measurement, the temperature profile in the barrel is extremely stable and accurate according to ISO 1133-2. The CEAST VisualMELT Software controls all functions of the tester both during single-weight and multi-weight tests.

The CEAST 9350 is a floor-standing impact system designed to deliver high impact energies from 0.59 - 750 J. As the high-end model in the CEAST 9300 line, it includes many time-saving features and supports a large variety of options – from environmental chambers to extra energy. The versatile testing system can be used to test a variety of specimens and is suitable for a range of impact applications including tensile impact tests, puncture tests, or tests to Izod and Charpy.

The new AutoX750 is a high-resolution automatic contacting extensometer which meets the requirements of ISO 9513, ASTM E83, and ISO 527-1 (2011). AutoX750 can enhance the productivity of testing laboratories with features including automatic gauge length positioning, adjustable contact force with a reference label, and multiple knife-edge options to accommodate different materials. TrendTracker™, a new software package for Bluehill Software, accelerates the data analysis workflow of a lab by allowing the user to rapidly search and analyze test results across multiple samples tested over time and on various test frames. The results are automatically exported to a robust and scalable database.

Instron's automatic carousel feeding system may significantly reduce the time and effort required for performing standardized tests on tabletop tensile testers from the Instron 5960 Series. An optional digital measuring system is now available to capture the thickness of all specimens at several points over the length of the specimen with an accuracy of 1 µm. It then transmits the values through an RS 232 interface to the Bluehill 3 Materials Testing Software.

For more information on Instron's products and services, visit [www.instron.com](http://www.instron.com). Click on "Contact Us" to locate a Sales or Service office near you.