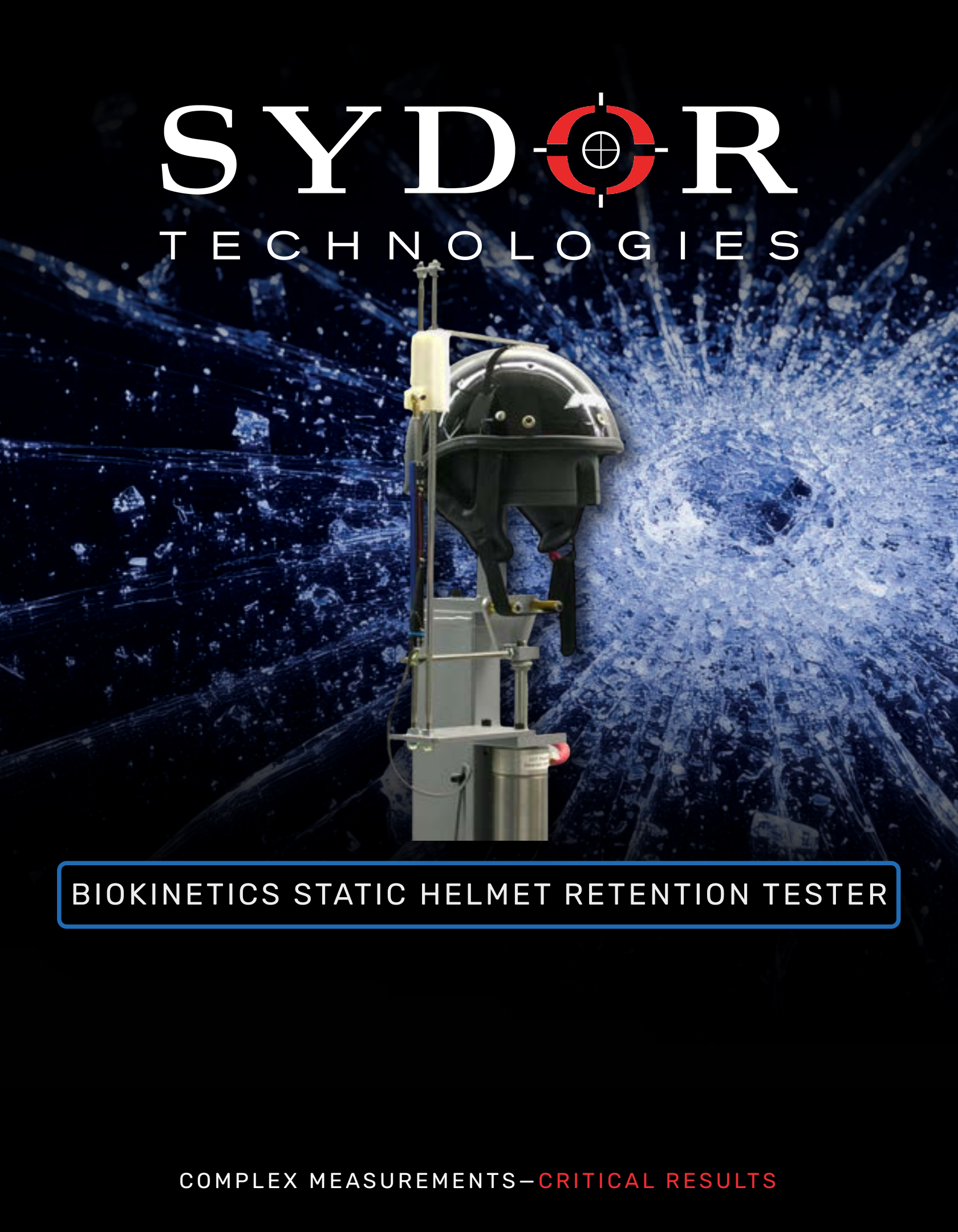
SYDOR TECHNOLOGIES



BIOKINETICS STATIC HELMET RETENTION TESTER

COMPLEX MEASUREMENTS—CRITICAL RESULTS

FEATURES

- Linear potentiometer integrated with data acquisition and software system
- Easily portable with mounted frame and wheeled design
- Utilizes standard shop pressures
- Integrates with Biokinetics' Helmet Impact Systems

ABOUT THE BIOKINETICS STATIC HELMET RETENTION TESTER

Biokinetics' Helmet Retention Tester for Static evaluations (HRT-S) evaluates the overall strength and displacement of a helmet's restraint system under load. The apparatus can apply loads to the restraint system reaching 2000 N (450 lbf). The system complies with international standards and is integrated with the Helmet Testing Software (HTS) to simplify application of loads, data collection and reporting.

The motorcycle helmet is placed on the headform and the retention strap routed under the jaw stirrup assembly. The HRT-S pneumatically loads the retention system to the designated preload. A linear potentiometer fitted between the jaw stirrup and a sliding element supported by the top of the test helmet records the initial position. The final test load is applied the potentiometer records the maximum displacement. An instrumentation box contains an electronically controlled pressure regulator, allowing for any load to be applied to the helmet retention for any given duration.

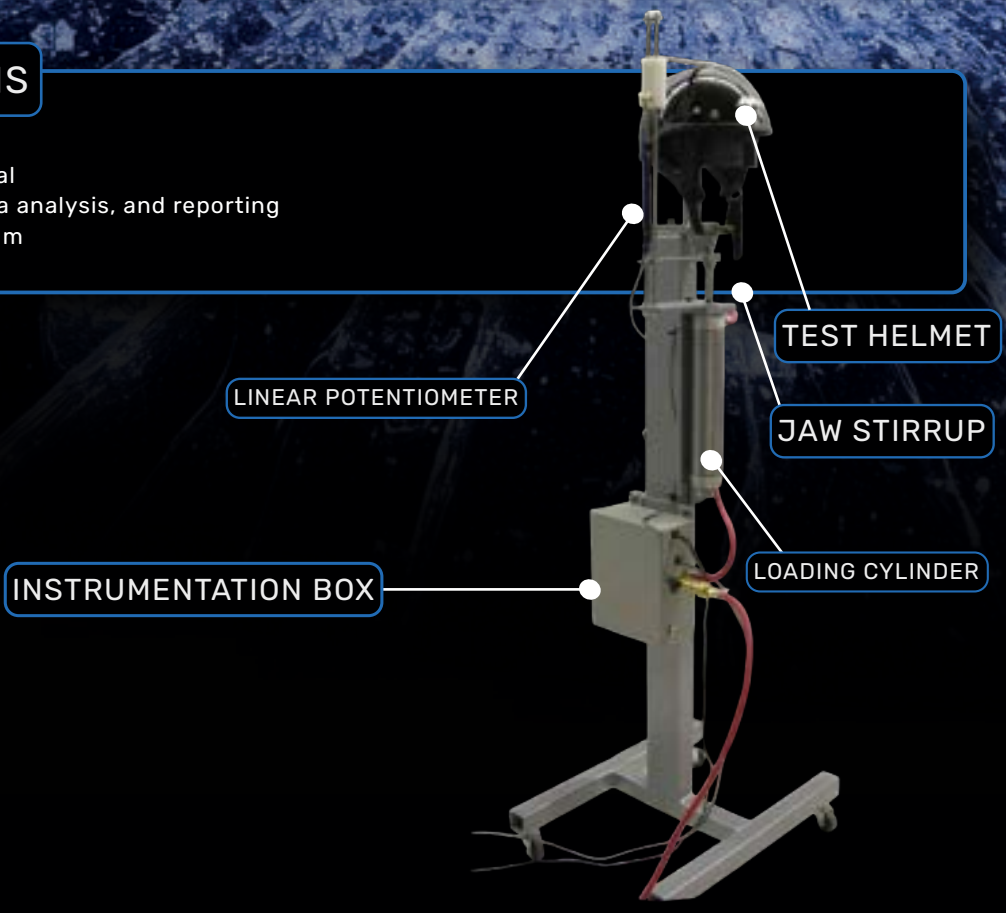
The tester complies with the DOT (FMVSS 218) helmet test standard. This tester is versatile and can be used for research or as an evaluation tool for other types of helmets. This is accomplished by varying the load and duration settings in the custom designed software and hardware

PRODUCT SPECIFICATIONS

- DOT Headforms: A, C, and D sizes
- Half ISO Headforms: A, E, J, M O are optional
- Software Automation: Data collection, data analysis, and reporting
- Dimensions (H x W x D): 1.8 m x 0.6 m x 0.5 m
- Weight: 28 kg

Biokinetics

Sydor Technologies is a proud distributor for Biokinetics



COMPLEX MEASUREMENTS—CRITICAL RESULTS