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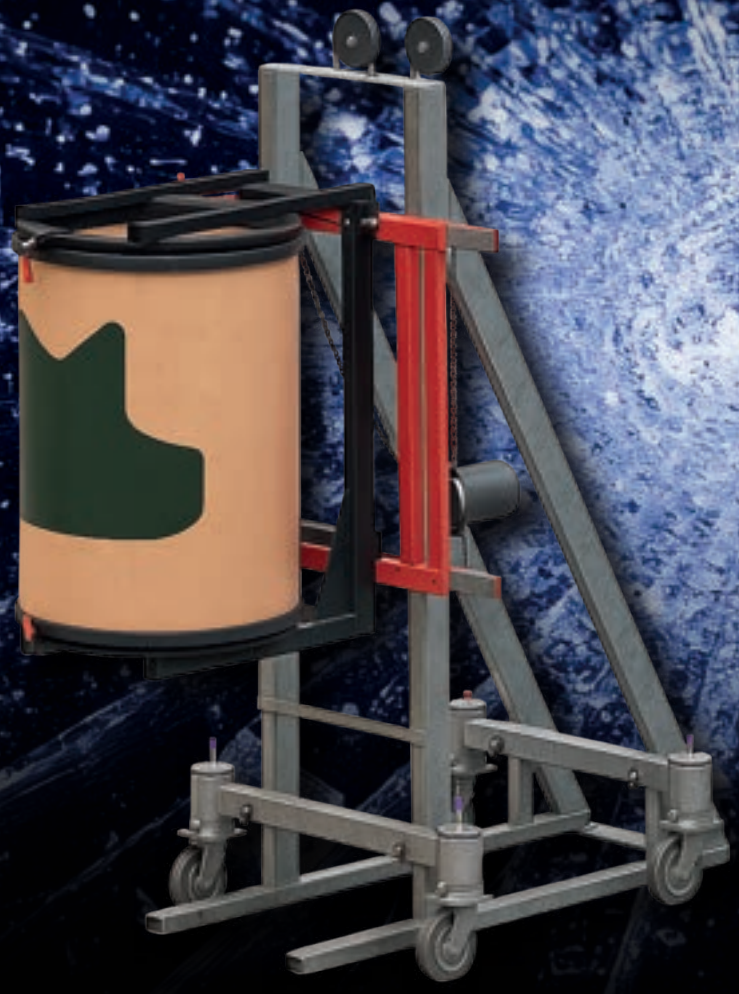

BIOKINETICS BLUNT TRAUMA TORSO RIG

COMPLEX MEASUREMENTS—CRITICAL RESULTS

FEATURES

- Deformable torso menbrane replicates human chest stiffness
- Utilizes high speed non-contact laser transducers and software to measure chest wall compression, velocity, acceleration, impulse and VC
- Time saving - 40% test time reduction in comparison with conventional clay-based methods

APPLICATIONS

- Backfire Signature Evaluation
- Soft Armor and Riot Gear Testing
- Ammunition Safety Evaluation

ABOUT THE BIOKINETICS BLUNT TRAUMA TORSO RIG

The Blunt Trauma Torso Rig (BTTR) was developed to mimic the human chest response under moderate to high rate impacts with small loading areas. Blunt trauma is assessed by measuring the peak dynamic deformation with custom software and correlating this to injury risks derived from biomechanical studies. The BTTR is intended for use with soft body armor, kinetic energy less lethal weapons and other distributed impacts of moderate to high speed.

The output of Biokinetics' BTTR Software includes Compression, Velocity, VC, Acceleration, Impulse, Duration, Rate and Peaks. Exports data to Microsoft Excel.

PRODUCT SPECIFICATIONS

- Range & Bandwidth: 200 mm, < 30 kHz
- Data Collection: 1 channel, 48 kS/s/ch, ±10 V input, 14 bit
- Pendulum: Diameter of 100 mm (3.9"), 2.2 kg (4.9 lbs.)
- Torso: Diameter of 511 mm (20.1"), height of 762 mm (30.0")
- System (W x D x H): 915 x 1640 x 1885 mm (36" x 64.6" 74.2"), 375 kg (826.7 lbs)
- Electrical: 120 VAC @ 60 Hz / 140 VAC @ 50 Hz 70 W max

Biokinetics

Sydor Technologies is a proud distributor for Biokinetics

COMPLEX MEASUREMENTS—CRITICAL RESULTS