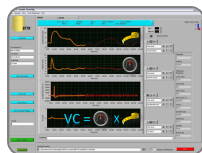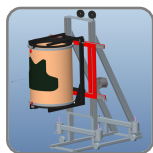# Blunt Trauma Torso Rig (BTTR)

Blunt trauma assessment with dynamic measurement of chest wall deflection

- For soft armour, hard armour, riot gear and body padding evaluations.

- Suitable for kinetic less-lethal ammunition safety evaluation.

- Deformable torso membrane replicates human chest stiffness at sternum for dynamic impact conditions.

- Clay backing alternative for backface signature (BFS) evaluation.

- High-speed non-contact laser transducer and software for measuring chest wall Compression, Velocity, Acceleration, Impulse and VC.

- Includes computer, data acquisition system, Biokinetics' BTTR Software and integrated system verification pendulum.

- Support frame provides membrane translation (2-axes) and rotation. Optional clay block support for perforation assessment of armour.

- 40% test time reduction in comparison with conventional clay-based methods for ballistics, increases testing throughput.

Specifications

Sensor Type:	Non-contact IR laser displacement transducer	Data Collection:	1 channel, 48 kS/s/ch, ±10 V input, 14 bit
Range:	150 mm	Computer, Interface:	Laptop, Windows 11, USB 2.0
Bandwidth:	< 30 kHz	Verification Pendulum:	100 mm dia., 2.2 kg
Software:	Biokinetics' BTTR Software. Outputs: Compression, Velocity, VC, Accel, Impulse, Duration, Rate and Peaks. Exports data to MS Excel®.	Part Number:	BTTR-002

Physical and Electrical

Torso Membrane:	Dia. 511 x H 762 mm	Electrical	120 VAC @ 60 Hz / 240 VAC @ 50 Hz 70 W max.
System:	W 915 x D 1640 x H 1885 mm, 375 kg		

Warranty

All components:	1 year limited

(All specifications are subject to change)

Biokinetics