

Materials List for:

A Test Bed to Examine Helmet Fit and Retention and Biomechanical Measures of Head and Neck Injury in Simulated Impact

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URL: <https://www.jove.com/video/56288>

DOI: [doi:10.3791/56288](https://doi.org/10.3791/56288)

Materials

Name	Company	Catalog Number	Comments
Hybrid III Headform	Humanetics or Jasti-Utama	N/A	50th Percentile ATD, for impact simulation
Hybrid III Neck	Humanetics or Jasti-Utama	N/A	50th Percentile ATD, for impact simulation
Linear Accelerometers	Measurement Specialties	64C-2000-360	for head acceleration measurement
Upper Neck Load Cell	mg Sensor	N6ALB11A	for neck load measurement
High Speed Camera	Vision Research	v611	for motion capture
Camera Lens	Carl Zeiss	N/A	50 mm f1/4, for motion capture
Camera Lens	Carl Zeiss	N/A	100 mm f/2.0, for motion capture
Bicycle Helmet	Bell	N/A	Traverse
Data Acquisition System	National Instruments	PXI 6251	for Hybrid III signal acquisition
Head Impact Drop Tower	University of Alberta	N/A	Custom-designed, for impact simulation
Optical Interrogator	Smart Fibres Ltd.	N/A	SmartScan, for optical sensor force measurement
Fit Force Sensor	University of Alberta	N/A	Custom-designed, for measuring helmet fit forces