

ATD Neck certification Aluminum Energy Absorber



PRODUCT DESCRIPTION

ATD's or crash test dummies are used worldwide for the evaluation of automotive safety restraint systems in crash testing. The dummies are regulated test device as the Hybrid III in the USA Code of Federal Regulations (Part 572, Subpart E) and also in the European ECE Regulations. Considered to have excellent bio fidelity and instrumentation capability, the ATD or crash test dummies can also be used in many non-automotive applications such as wheelchairs and medical and sport equipment etc.

To ensure certified performance, ATD's certification requires neck extension/flexion tests. Aluminum Honeycomb energy absorbers are used to create the pulse for neck flexion extension tests.

TECHNICAL DESCRIPTION

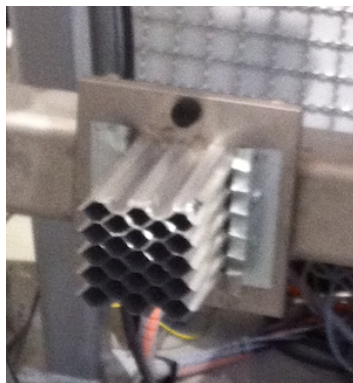
Individual energy absorber - Aluminum honeycomb:

- Alloy 3003 series
- Perforated material
- Rc 0.30 Mpa +/- 10%
- Density 30 kg/m³

Standard Dimension:

- W 1250 x L 1250 mm
- 2 Thicknesses as requested for testing:
 - T1 = 152.4 mm (6 Inches)
 - T2 = 76.2 mm (3 Inches)
- Cell size is 19 mm (3/4 Inch).

The ATD energy absorbers are supplied as slices, strips or pre-cut blocks according to customer needs. Materials also available upon request with over expanded cell size to around 17,4 mm (11/16 Inch) in order to better fit the 4 pins support.



Energy Absorber - 5x5 cells



Energy Absorber - 4 pins support

QUALITY INSURANCE

The blocks are defined to ensure consistent and good level of repeatability with high quality honeycomb. Aluminum Honeycomb products are designed and manufactured according to the ISO 9001 (V2008) standard.

