High Energy Impact Tests

Experience

CTA has significant experience in the area of impact tests on aeronautical components and new materials using projectiles made of different materials (rubber, metal, jelly, hail, etc.) and varying geometry in order to simulate real impacts.

Know-How

We use different projectile materials (rubber, metal, jelly, hail, etc.) and geometric shapes (rectangular, circular and spherical), fitting them to a sabot previously calibrated for the test bench barrel diameter according to customer requirements.

Tests are carried out of specimen boundary conditions by means of interfaces designed, manufactured and assembled by CTA in order to simulate the real behaviour of the test specimen.

CTA uses validated instrument interfaces (links, rods, lugs) to ensure accurate and reliable measurement, as well as standard instrumentation with strain gauges and accelerometers.

Capacities

High energy impact test bench able to reach 200m/s.

Restricted area.

Projectile maximum diameter: 250mm.

Strain gauges and accelerometers.

1 High speed video camera.

Ultrasonic Inspection Equipment.

Post test functional test benches.