



THE BANC NATIONAL D'EPREUVE CONDUCTS IMPACT RESISTANCE TESTING FOR RAIL & AVIATION SECTOR

A UNIQUE TEST LABORATORY IN FRANCE

With more than 200 years of experience in the field of ballistic, the Banc National d'Epreuve has a test laboratory that is unique in France and a reference at the European level, enabling it to carry out tests while keeping the samples cold.

The purpose of the tests is to test the various constituent parts of trains or aircraft when they are subjected to natural projectiles.

ISO 9001 CERTIFICATION ISO 17025 ACCREDITATION

The Banc National d'Epreuve is accredited by the LABORATORIES section according to NF EN ISO/CEI 17025 standard and COFRAC rules of application under N°1-6348 for the following tests:

- NF F07-101
- NF F19-293 Annex A
- NF F31-129 §15.1.1
- NF F31-250 §15.1.
- UIC 651 OR Annex C
- NF EN 13261 Annex C
- NF EN 15152 (2007) : §6.2.6, §6.2.7, §6.2.9.
- NF F15-818 §18.5.1, §18.5.2, §18.5.3

Off accreditation tests:

- NF EN 13261 Annex D
- GM/RT 2456 §C3.2, §C3.3
- NF EN 1515, (2019)2,

TEST EQUIPMENT

- A building specifically dedicated to these tests, which need to be carried out on full-size samples.
- 3 pneumatic launchers to propel various prototyped or standardized projectiles, blocks of ice, hailstones, etc. up to a diameter of 180 mm.
- High speed camera: 7,500 fps in HD and a maximum of 775,000 fps.
- Conditioning of 500mm x 500mm samples at temperatures ranging from -70°C to 300°C and from 10 to 98% relative humidity depending on the temperature.
- Conditioning of windscreens from production up to 1800 mm x 1800 mm in size from -25°C to 0°C.
- An Engineering team that defines and produces customized supports, corresponding to the requirements of the standards.

TESTED PRODUCTS

Side and front windows, driver cabs, paints and coating, protective boxes, axle sections, Pitot probes, lights, beacons ...

