



Temperature Test Facility

Overview

The facilities are used for development tests of vehicle interior components, cockpits and protection systems, as well as conformity to production tests.

Static deployment tests are also performed to examine the interaction of a deploying airbag with the parts from a cockpit or trim at extreme temperatures.

Depending on the size of the test objects, Continental operates temperature chambers with different sizes and features.

The test facility allows single components of airbag modules to be tested to record the deployment characteristics.

Furthermore, the deployment behaviour of the airbag and the interaction with components in the vehicle environment can be tested through a range of temperature.

The static tests are usually performed in the temperature chamber to the requirements of the ISO 12097-2 which covers testing of airbag modules.

In one of the test chambers, the test assembly may be moved out of the chamber with deployment testing less than 10 seconds later.

This working mode is mainly of interest, to perform "out of position" investigations at extreme temperatures as well as drop tower tests.

Technical data

Full Vehicle Temperature Chamber (pictures first page and upper right)

- › Dimensions: 6,5 x 3,5 x 2,5 m³
- › Temperature range: -40 °C to +120 °C
- › Temperature gradient: > 1 °C/min
- › Cooling power: 30 kW
- › Heating power: 36 kW
- › Air exchange after test: 3000 m³/h

Specialities Full Vehicle Temperature Chamber

- › Load-carrying capacity for vehicles up to 3000 kg
- › Large windows for filming
- › Bullet-proof glass
- › Redundant cooling machine
- › Programme controlled temperature profile

System Test Temperature Chamber (bottom picture)

- › Dimensions: 2,5 x 2,5 x 2 m³
- › Temperature range: -60 °C to +120 °C
- › Temperature gradient: > 1 °C/min
- › Programme controlled temperature profile

