

**Name of the organization**

BAM Federal Institute for Materials Research and Testing

**Name of the infrastructure / laboratory**

TTS – Test Site Technical Safety

**Address and country of the infrastructure / laboratory**

An der Duene 44, 15837 Baruth / Mark, Germany

**Person responsible of the access / Contact person**

Schmidtchen

**Phone / Fax / Web / Email**

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**Main field of activity of the infrastructure / laboratory**

► Safety

**Short description of the infrastructure / laboratory**

This is a test site about 50 km S of Berlin and 12 km<sup>2</sup> large. It serves for tests concerning dangerous goods, explosives, and similar things. The explosion test ground with a diameter of 400 m enables tests of up to 150 kg of TNT equivalent to be performed. To protect the surroundings the explosion test ground is surrounded by an earth bund. Different pieces of equipment and facilities are available around the explosion test ground to allow the determination of the dangerous characteristics of substances and systems and to test safety devices. In particular fire and explosion tests are carried out. The results are used to ensure safe handling of such materials and objects and the safety of relevant technical equipment. Examples are explosives, pyrotechnical articles, highly enriched materials from the chemical industry, compressed gases as well as storage and transport containers. Two new fire test stands with relevant infrastructure were established on the BAM Test Site Technical Safety in 2008. These measuring stations can be used for open fire tests and research if needed. They are mainly used for the investigation of the internal and external thermal load-bearing capacity of containment systems for dangerous goods such as pressure vessels, storage and transport tanks, packaging and IBC as well as transport and storage tanks for radioactive substances. Thermal energy is provided by burning a liquid propane gas mixture. Liquid gas is injected through the burner nozzles. Heat input of up to 110 kW/m<sup>2</sup> can be supplied according to the relevant provisions in international regulations, standards and directives.

