

NEW LARGE HE TEST FACILITY FOR CONVENTIONAL DETONATIONS

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A new large HE test facility for the simulation of conventional detonation effects was put into operation in the underground facility of the WTD 52. The new simulation tunnel extends the experimental possibilities of the WTD 52 by making it possible to simulate detonations of explosive charges up to one ton of TNT equivalent with a much lower amount of explosive under safe conditions. The dimensions of the facility allow the testing of large construction elements, for example a facade of a two-story building.

The test facility was laid out using the methods of numerical simulation. This made it possible to determine the exact geometric shape needed to simulate the desired pressure – and impulse range prior to the start of the construction. First test series with large façade structures prove the usefulness of the new test facility.

The presentation describes the new simulation facility and shows the results of some test series.