LABORATORY DETONATION CHAMBERS

Laboratory detonation chambers allow users to safely carry out detonation experiments of up to 250 g TNT equivalent directly inside explosives laboratories without any excessive noise loading.

They can be used for scientific and forensic investigations, research, development, testing or quality control in the area of energetic materials, confined explosions and related applications such as the explosive forming of metals or the safe and environmentally friendly disposal of explosive wastes. The service life of the detonation chambers can reach 10,000s shots.



ADVANTAGES & FEATURES

- > Multiple ports for the installation of pressure or temperature sensors for the characterization of confined explosions
- > Optical cable ports for investigation of the detonation processes by the VOD 815, the OPTIMEX 64 or the VeloreX PDV
- > Safe execution of brisance, cook-off, large-scale ESD and large-scale stability tests
- Gas-tight valves enable the creation of different gas atmospheres in the chambers and the sampling of the post-explosion gases
- > Fast ventilation of the chamber interior with compressed air after a shot, ready within minutes for another experiment
- > Safety interlocks prevent the premature electric firing of the explosive charges
- Periodically proof-tested on 125 % nominal capacity, produced for more than 15 years with no safety incident or accident reported
- Very little maintenance work and costs

MODELS

- LDC 100 is a a stainless steel vessel closed by a screw-mounted lid (the explosive charge hangs in the chamber lid) with a maximum capacity of 100 g TNT eq. Due to its weight (approx. 300 kg), the vessel can be embedded in a special working stand with an electric crane manipulator, rotating fixture for easier cleaning and tool shelves for accessories.
- KV 250M5 is a heavy-duty steel detonation chamber with a maximum capacity of 250 g TNT eq. and a large internal space for testing setups, equipped with an easily accessible working table for positioning the explosive charge, a manually operated bayonet lock for the quick closing and opening of the lid, input and output valves, 10 ports for optical or electrical measuring cables, as well as 4 symmetrically positioned optical windows for the installation of other sensors or high-speed cameras.

Product name	LDC 100	KV 250M5
Capacity [g TNT]	100	250
Working table dimensions [mm]	-	Ø 300
Weight [kg]	600	2 300
Total dimensions L×W×H [m]	1.0 × 1.7 × 2.2	1.4 × 1.4 × 2.0



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