

RFNC – VNIITF LOCALIZING BLAST RESISTANT DEVICES FOR STUDING TOXIC AND RADIOACTIVE SUBSTANCES

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The primary way for obtaining knowledge on dynamic properties of materials is to study their behavior under shock wave loading. Shock waves can be generated in materials under explosive loading.

Outdoor testing of some materials is inherently unsafe. Above all others these are toxic and radioactive materials such as beryllium or uranium.

To study such materials, RFNC – VNIITF has developed a series of localizing explosion-proof chambers (EPCs) which allow explosive loading of tested samples while ensuring environmental safety of the experiment.

The developed EPCs have a simple design and provide HE explosion of up to 10 TNT eqv. kg without any sealing failure. They have been successfully used at RFNC – VNIITF for a long time to study toxic and radioactive material samples.
