

OZM RESEARCH

Instruments & Technologies for Energetic Materials

BALLISTIC MORTAR

Product Datasheet

Ballistic Mortar test is used to measure the explosive power of a substance. A detonator is initiated in the substance whilst the substance is confined in the bore of a mortar by a steel projectile. The recoil of the mortar is measured and the power is calculated as a percentage equivalent of picric acid - the explosive standard.

A massive steel mortar enclosed by a projectile is suspended from the pendulum axis by a long pendulum arm. The explosive charge of a given mass is initiated in the mortar cavity. Due to the explosion of the detonative sample, the projectile is fired out of the mortar, whereas the mortar is swung backwards from its position by the counteracting force. The maximum swing of the mortar is recorded and it serves as a measure of the explosive power. The device consists of a ballistic pendulum, a steel projectile and basic accessories for charge preparation. Mass of the sample is in the range of 2 - 10 g TNT eq.

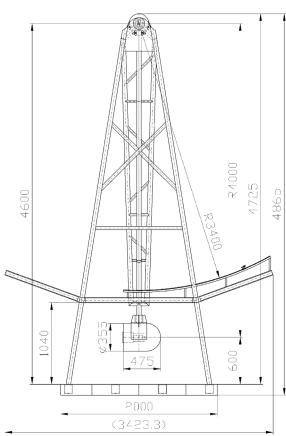
TECHNICAL PARAMETERS

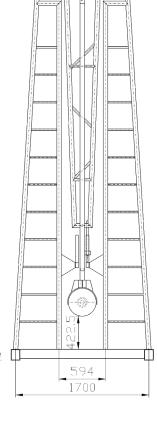
Weight: Total weight: approx. 1200 kg

Weight of mortar: 310 kg Weight of projectile: 15 kg

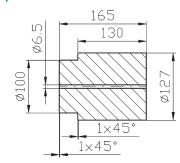
Dimensions (L \times W \times H): 2.0 (3.5) \times 1.8 \times 4.9 m



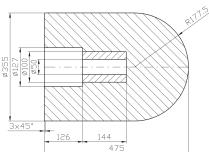




Projectile



Mortar



Concrete foundation $3 \times 3 \times 1$ m and structure for projectile capture are not part of the delivery.