UN GAP TEST

Product Datasheet

UN GAP TEST apparatus is designed and used to measure the ability of a substance, under confinement in a steel tube, to propagate a detonation by subjecting it to the detonation from a booster charge. The explosive to be tested is subjected to the action of the shock wave of a known pressure. Such wave is generated by means of a booster and shock wave pressure attenuator. Whether or not the shock wave caused the complete detonation of the explosive can be concluded on the basis of the mechanical effects produced after the detonation of the explosive hole e.g. cutting in a steel plate.

The **UN GAP TEST** is a sensitivity test at which sample is exposed to the shock wave is weakened by passing through a barrier of known properties (usually PMMA is used). The function of this barrier is not only to weaken the shock wave from the donor charge, but also to isolate the acceptor charge from the detonation products (hot gases, burning particles).

CONSUMABLES

UNG-ST	Seamless steel tube external diam. of 48 mm ± 10%, length 400 mm, wall thickness 4 mm ± 10%
UNG-WP	Witness plate 150 x150 x 3 mm
UNG-SP	Steel spacer 60 mm external diam. 47 mm internal diam, 1.5 mm thick
UNG-DH	Plastic (PA) detonator holder diam. 50 mm, length 30 mm
UNG-PS	PMMA separator diam. 50 ± 1 mm, length 50 ± 1 mm
UNG-WH	Wooden stand
Consumables	1 pc role of insulating tape, polyethylene sheet 0.08 mm thick

OPTIONAL ACCESSORIES

UNGAP -PT	Pressing tool for booster diam. 50 ± 1 mm and length 50 ± 1 mm

INSTALLATION REQUIREMENTS

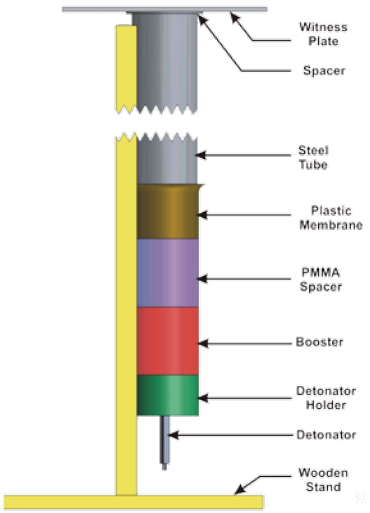
Detonation chamber, bunker or shooting range etc.

Pressing tools for booster

SHIPPING DATA

(for 10 pcs. of apparatus including pressing tool)

Package dimensions (W x L x H):	77 x 60 x 40 cm
Package gross weight:	70 kg
Custom code:	9031 20 00



APPLICATIONS

A shock wave, which can be generated in various ways in an explosive, frequently serves as a tool for the initiation of explosives. The Gap test enables the determination of the minimum shock wave pressure that can cause complete detonation of the tested explosive.

UN GAP TEST apparatus is designed to comply with requirements of the following standards of testing:

- UN Recommendation on the Transport of Dangerous Goods, Manual of Tests and Criteria, United Nations, New York,1995, Test 1 (a) and 2(a).

INSTRUMENT DESCRIPTION

The test sample is contained in a steel tube. The bottom of the tube is closed with two layers polyethylene sheet. A mild steel witness plate is mounted at the upper end of the steel tube and separated from it by steel spacer. The tube is placed in a vertical position and the booster charge is placed in direct contact with the sheet which seals the bottom of the tube. The detonator is fixed in detonator holder against the booster charge.

Typical sample weight: 500 g

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