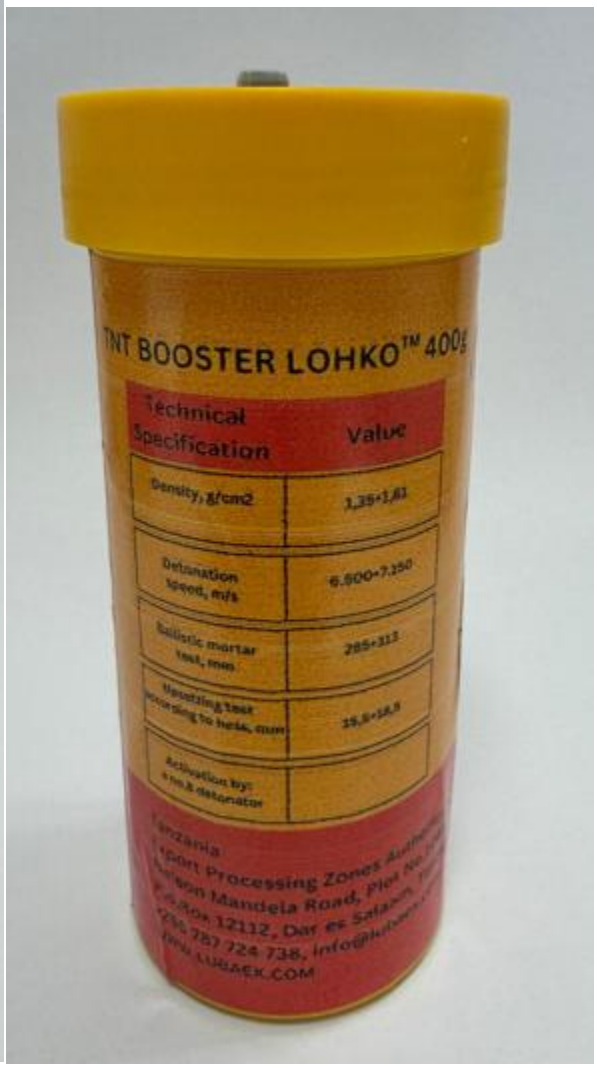
TECHNICAL DATA SHEET

Lubaex™ Lohko™ 400 TNT Booster



Technical Properties

Density, g/cm2	1,35+1,61
Detonation speed, m/s	6.500+7.150
Ballistic mortar test, mm	285+313
Upsetting test according to hess, mm	15,5+18,5

Activation by: a no.8 detonator

Description

Lubaex™ Lohko™ 400 TNT boosters are made from a high explosive composition cast into a cylindrical cardboard shell. Two longitudinal tunnels in the booster accommodate either a detonator or detonating cord. One tunnel has straight walls while the other is stepped at the top of the booster to provide a stop for the detonator. Detonating cord, signal tube or lead wires are protected from damage by a recessed well at the base of the booster.
Lubaex™ Lohko™ 400 TNT boosters can securely hold the detonator in place during loading, while still enabling safe removal of the detonator if required. Lubaex™ Lohko™ 400 TNT boosters contain a waterproof plastic bottle containing PETN explosive. The bottle allows initiation of the booster by low charge weight detonating cords.
Lubaex™ Lohko™ 400 TNT boosters have a high density, and a high velocity of detonation (VOD) to maximize performance.

Safety

Lubaex™ Lohko™ 400 TNT boosters contain molecular explosives, which can be initiated by intense impact or friction or heat. As with all high explosives Lubaex™ Lohko™ 400 boosters should be handled and stored with care. Boosters must not be allowed to impact with a solid surface or another booster. Any such collision may cause damage that could lead to a misfire, or a premature initiation. Lubaex™ Lohko™ 400 TNT boosters may be used at temperatures up to 70°C. DO NOT use these boosters with any detonator, which cannot be completely contained within the primer. If this is not observed, damage to the detonator may occur during charging which may lead to a premature detonation.

Application

Lubaex™ Lohko™ 400 TNT boosters are reliably initiated by detonators or by detonating cords containing at least 3.5 g/m PETN. Lubaex™ Lohko™ 400 TNT boosters have been specifically designed to provide reliable initiation of pumped, augered and packaged explosives. The main intended application, for Lubaex™ Lohko™ 400 TNT boosters, is for use with explosives in hole diameters above 102mm. Lubaex™ Lohko™ 400 TNT boosters will function reliably in any depth of water encountered in the mining environment.

Recommendations For Use

With Detonating Cord

Use Lubaex™ Lohko™ 400 TNT boosters with any detonating cord, which has a PETN charge mass of 3.5 g/m or greater. Ensure the booster is securely attached to the detonating cord by passing the cord down through one tunnel, back through the other tunnel. Tie the cord to form a loop, then lower the complete assembly to the desired location in the blasthole. Cut the detonating cord downline from its reel and adequately secure it at the blasthole collar. Charge the hole with explosives to the design level. For any subsequent primers on the same downline, unfasten the detonating cord tail and thread the end of the cord through the straight walled tunnel. Re-secure the cord tail, at the collar, and slide or lower the primer to the desired location.

With Delay Detonators

Thread the detonator through the booster, shown in Figure 1. After assembly, the top and bottom faces may be taped for additional security against the detonator falling out especially in rough, angled blastholes. Lower the complete assembly to the desired location in the blasthole. Avoid walking on the signal tube or lead wires as this is likely to

cause damage. In all applications, ensure that the primer is completely immersed in the explosive it is intended to initiate. This can be achieved by either pulling the primer up into the explosive or suspending the primer above the hole bottom during loading. Large diameter packaged explosives should be lowered on top of primers, rather than dropped from the blasthole collar.

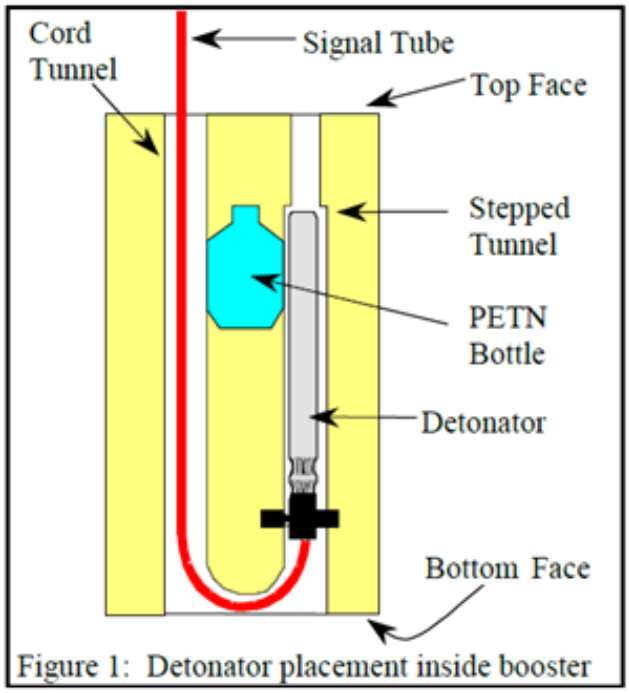


Figure 1: Detonator placement inside booster

The cord or tube downline should be kept taut during charging and stemming, to prevent damage and minimize abrasion. However, if a primer begins to float on top of a rising column of bulk explosive, temporarily slacken the downline. Once the surface of the explosive column has risen past the primer, tension can be reapplied to the downline.

Packaging

Lubaex™ Lohko™ 400 TNT boosters are packed in cardboard cases. The case dimensions are 0.356 m x 0.261 m x 0.135 m. A case weighs 13 kg and contains 30 boosters.

Storage and Handling

Product Classification

Authorized Name: Lubaex™ Lohko™ 400 TNT boosters
Proper Shipping Name: Boosters, without detonator
UN No: 0042
Classification: 1.1D
All regulations pertaining to the handling and use of such explosives apply. These boosters should be stored in a cool, dry magazine licensed for 1.1D explosives, and oldest cases should be used first. Lubaex™ Lohko™ 400 TNT boosters have a maximum shelf life of 5 years in good storage conditions.