TECHNICAL DATA SHEET

Lubaex™ Putki™ Booster

Technical Properties

Nominal weight	425 g
Nominal Diameter	51.1 mm
Nominal Length	142 mm
Shell Color	Orange
Nominal density	1.7 g/cm3
Nominal Velocity of Detonation	7.2 km/s
Nominal detonation pressure	22 GPa
Water resistance	Excellent
Oil resistance	Excellent

Description

Lubaex™ Putki™ boosters are made of high explosive composition cast into a plastic shell. One blind detonator tunnel and one through tunnel in the booster accommodates only electronic detonators. A steel sleeve, which is fully encased in plastic, protects the electronic detonator from dynamic shock. A recessed well at the base of the booster protects the electronic detonator lead wires from damage.
Lubaex™ Putki™ boosters can securely hold the electronic detonator in place during loading, while still enabling safe removal of the detonator if required. Lubaex™ Putki™ boosters have a high density, and a high velocity of detonation (VOD) to maximize performance.

Safety

Lubaex™ Putki™ boosters contain molecular explosives, which can be initiated by intense impact, friction or heat. As with all high explosives, Lubaex™ Putki™ boosters should be handled and stored with care. Avoid impact with solid surfaces or other boosters. Any such collision may cause damage that could lead to a misfire, or a premature initiation. Lubaex™ Putki™ boosters may be used at temperatures up to 70ºC. DO NOT use these boosters if the electronic detonator cannot be completely contained within the booster. If this is not observed, a misfire or damage to the detonator may occur during charging which may lead to a premature detonation.

Application

Lubaex™ Putki™ boosters are intended for use only with electronic detonators. Lubaex™ Putki™ boosters have been specifically designed to provide reliable initiation of pumped, augured and packaged explosives. The main intended application for Lubaex™ Putki™ boosters, is for use with explosives, in hole diameters above 102 mm where bore hole pressures may affect detonator timing and proper function. Lubaex™ Putki™ boosters will function reliably in any depth of water encountered in the mining environment.

Recommendations For Use

Thread the detonator through the booster and ensure the detonator is fully inserted. 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 primer assembly to the desired location in the blasthole. 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 at the required location within the hole during loading. Large diameter packaged explosives should be lowered on top of primers, rather than dropped from the blasthole collar. The downlines 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™ Putki™ Boosters are packed in single layer fiberboard cases. External case dimensions: 0.356 x 0.261 x 0.135 m. A case weighs 8 kg and contains 18 boosters.

Storage and Handling

Product Classification

Authorized Name: Lubaex™ Putki™
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™ Putki™ boosters have a maximum shelf life of 5 years in proper storage conditions.