

Pentex™ AP 16 – 454 Australia



Description

Pentex™ AP 16 – 454 boosters provide high energy initiating power for a wide range of explosive applications. The recessed groove in the base of Pentex™ AP boosters ensures reliable initiation with all types of detonator assemblies. They can be used to provide safe and reliable priming of booster sensitive explosives on most surface and underground blasting operations.

Pentex™ AP boosters are ideal for use in blasting applications which require multiple decking and multiple boosters down the hole.

Safety

Pentex™ AP boosters contain molecular explosives, which can be initiated by intense impact, friction or heat. As with all high explosives Pentex™ AP 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. Pentex™ AP boosters may be used at temperatures up to 70°C. Seek technical advice from Orica for priming systems suitable for higher temperatures. 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.

Technical Properties

Nominal diameter	60 mm
Nominal length	120 mm
Nominal mass	454 g
Shell Material	Open top cardboard canister
Shell colour	Fluorescent Orange
Nominal density	1.6 g/cm ³
Nominal Velocity of Detonation	7.9 km/s
Nominal detonation pressure	25 GPa
Tunnel Arrangement	One blind detonator well and two through tunnels

Application

Pentex™ AP boosters can be initiated by standard high strength electric, electronic and non-electric detonators. Pentex™ AP boosters can also be initiated by detonating cord containing at least 3.6 g/m PETN in dry blasting conditions. Pentex™ AP boosters are ideal for use in blasting applications with hole diameters 102 mm or larger.

When used with booster-sensitive explosives, ensure that the primer is in intimate contact with, and surrounded by, the explosive.

Recommendations For Use

With Detonating Cord

Only use detonating cord as the initiator for Pentex™ AP boosters in dry blasting conditions.

Use Pentex™ AP boosters with any detonating cord, which has a PETN charge mass of 3.6 g/m or greater. Ensure the booster is securely attached to the detonating cord by passing the cord down through the smaller center tunnel first, then back through the side tunnel. Tie the cord off by using a reef style knot, 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

Pentex™ AP 16 – 454

Australia

detonating cord tail and thread the end of the cord through the smaller center tunnel. **The detonating cord must pass through the smaller center tunnel otherwise the booster can misfire.** 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 through side tunnel and put the detonator into the blind detonator well. Ensure the detonator is fully seated within the detonator well. Also ensure the signal tube or lead wires are fully seated in the recessed well at the base of the booster to protect them from damage. After assembly, the top and bottom faces may be taped for additional security against 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 the primers, rather than dropped from the blasthole collar.

Packaging

Pentex™ AP boosters are packed into cardboard cases. The case dimensions are 387 mm X 341 mm X 132 mm (L x W x H). A case weighs 17.5 kg and contains 35 boosters.

Storage and Handling

Product Classification

Authorised Name:	Pentex™ AP 16 - 454
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. Pentex™ AP boosters have a maximum shelf life of 5 years in good storage conditions.

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Emergency Telephone Numbers

Within (country): 1800 033 111 or 03 9663 2130
Outside (country): 61 3 9663 2130

