

Cordtex Detonating Cord

Description

Cordtex detonating cord provides quick, safe and convenient means of simultaneously initiating any number of independent or inter-related charges. They are strong, flexible and lightweight, comprising an explosive core of PETN contained within a spiral of natural or synthetic fibers, plastic sheathing and tapes. The shock wave from an exploding detonating cord with a VOD of 6,500 -7000 m/sec is transmitted to other high explosives it is in contact with. Cordtex detonating cord is available with a variety of PETN charge weights designed for different applications.

PETN charge weights of Orica cords vary from 5.0 gm/m for "light" cord to 40.0 gm/m for "heavy" cord although the most commonly used are 5.0 to 10 gm/m cords.



Safety

Cordtex detonating cord is a high explosive that must be handled with care and respect at all times.

Except for a direct lightning strike, Cordtex detonating cord is unaffected by stray currents generated by electrical storms, power lines and radio/radar transmitters which make electric firing comparatively hazardous. *Intense impact or friction but is insensitive to accidental initiation during normal handling and use can initiate Cordtex detonating cord.* Cordtex can detonate if subjected to extremely high temperature, but remains stable and safe to use below 80°C. For temperatures between 70°C and 80°C exposure time should not exceed 24 hours.

Cordtex detonating cords are explosives and should therefore be stored in magazines and transported/handled with appropriate care and respect.

Applications

Cordtex detonating cords can be initiated by a No. 6 or No. 8 plain detonator, electric or nonelectric detonator attached to the side of the cord. Cordtex detonating cord with PETN core loads of 10 g/m is most frequently used as downlines in blastholes either for directly initiating charges of detonator sensitive NG explosives, watergels and emulsions or indirectly initiating columns and decks of detonator insensitive Anfo mixture and watergels and emulsions by means of special primers or boosters e.g. Anzomex Boosters. Low energy Cordtex detonating cord is used for reasons of economy. There is also a growing tendency to use low core load detonating cords as downlines to minimize "chimneying" of the stemming material to allow the explosion gases to work more effectively and to reduce the likelihood of side initiation of some blasting agents and reduce damage to the explosives column by desensitisation.

Low strength Cordtex detonating cord of 5.0 gm/m PETN coreload is recommended for use in conjunction with Exel nonelectric initiating systems.

Technical Properties & Packaging

Export Trademark	PETN Coreload (gm/m)	Diameter (mm)	Colour	Reel Length (m)	Reels per Case	Min Tensile Strength (kg)
Cordtex 5	4.6-5.8	4.2±0.1	YELLOW	450	4	70
Cordtex 10	9.2-10.35	4.5±0.1	WHITE	350	4	70
Cordtex 40	37.5-40.0	7.6±0.2	ORANGE	100	4	70

Velocity of detonation is from 6.5 to 7.0 km/s.

Note: This product is sold in full case quantities only.



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Recommendations for Use

Cordtex Detonating Cord downlines must be continuous lengths of cord and must never incorporate knots splices inside a blasthole.

Cordtex Detonating cord should be cut using either an anvil-type tool or a sharp knife. Cutting devices, which have a shearing action (e.g. scissors), must not be used to cut detonating cords.

Cordtex Detonating Cord can be attached to a cartridge of high explosives by simply tying the cord securely around the cartridge or laced through a hole punched about 150 mm from the top and tied above the cartridge. When using Power Prime Primers, *Cordtex* Detonating Cord is threaded through the two holes provided permitting a simple, secure way of attachment. As soon as the first cartridge or primer is lowered into position, the *Cordtex* Detonating Cord downline should be cut from the collar of the blasthole to allow for settlement and for making connections.

A strand of most *Cordtex* detonating cord can be initiated by the detonation of an adjacent strand having a PETN core load of 5 gm/m or greater, provided that the two strands are effectively connected by a suitable knot. The most satisfactory splicing knot is the reef knot while double-wrap clove hitch and clove hitch are satisfactory connections between trunklines and downlines for all types of detonating cord.

When connecting detonating cord lines, pull all knots up tightly so that the two lines are in positive contact, and trim the tail ends of the knots off short to prevent them from crossing the trunklines or downlines and causing cut-offs. Keep each connection at right angle as possible to prevent possible cut-off failure that can occur where the downline makes an acute angle back towards the point of initiation of the trunkline. Trunklines can be initiated by an electric detonator, an *Exel* nonelectric detonator or by a plain detonator crimped with safety fuse. The base end of the detonator taped to the cord must point in the direction that the detonating cord is required to detonate.

Storage and Handling

Store *Cordtex* detonating cord in a suitably licensed magazine for Class 1.1D explosives.

Cordtex detonating cord has a minimum shelf life of five years in good storage conditions

Shipping Name: Cord, Detonating, Explosive, Blasting, Type E; Classification 1.1D

UN No. 0065

All regulations pertaining to the handling and use of such explosives should apply.

Trademarks

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