

* Explosive used in Tunnelling

03 types of explosive used for tunnelling :-

- ① Disruptive explosive
- ② Power explosive
- ③ Liquid air explosive

① Disruptive explosive :-

These are commonly used explosives for tunnelling. They are available in the market in the form of cartridges of size 2.5cm to 20cm in diameter and 20cm to 70cm in length.

Common types of disruptive explosives used in tunnelling are :-

- (a) Straight dynamite
- (b) Gelatin dynamite
- (c) Ammonia dynamite
- (d) Blasting dynamite

② Power explosives :-

• These explosives are not commonly used in tunnelling.

• ~~The~~ Types of power explosives used for tunnelling are :-

(a) Blasting Powder

• It is slow in burning, therefore it is not commonly used in these days.

(b) Nitrate explosive

(c) Nitraman:

• It is highly explosive but a special ~~primer~~ primer is required to detonate it, therefore, it is rarely used in tunnelling.

③ Liquid air explosive

- These explosive usually consist of 9.5% oxygen at temperature of 191°C , which is absorbed by dipping a cartridge of absorbent.
 - Such explosives require special skill in their manufacture, transporting and storing.
 - Therefore, not commonly used.
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