## Different Types of Bolts

Different types of bolts are available online, so as to fit into various industry requirements. Following are the most commonly used types of bolts, used in various applications and sectors. Do have a look!

## Countersunk bolts parts definition



## \#Anchor Bolts

Anchor bolts are used to fasten various kinds of objects or structures to concrete. These bolts are available in various designs, which suitably fit into almost every industry requirement. These types of rivets are enabled with a threaded end, to which a nut and washer are fastened for the external load.

## Hex Nut

## Bolt

## Expansion

Sleeve (Cutaway)

## Expansion

Wedge

These fasteners are extensively used in all sorts of fields, ranging from nuclear power plants and standard buildings to dams and home renovations. They help in firmly fixing implanted plates to a concrete foundation, featuring a structural steel element.

One of the simplest forms is the cast-in-place anchor, which is the strongest type of fastener. It features a standard bolt with a hexagonal head, which is fixed in a wet concrete before it sets. It is used in heavy-duty machines mounted on poured concrete floors.


## Features

- Rust-resistance
- Sturdiness
- High consistency

Other commonly used designs features a bent bolt along-with a hook at the end. Click here to know more about these bolts.

## \#Roof Bolts

A roof bolt usually comprises of a shaft for injection into a pre-drilled hole, mostly in a mine roof.


The head of such bolts is counter-balanced with respect to the longitudinal axis of the shaft so that when the rivet is rotated by means of its head, the shaft creates a circle of greater diameter an offset between $0.08^{\prime \prime}$ and $0.25^{\prime \prime}$. Usually, the counterbalance should be between 0.10 and 0.16 inches.

This kind of method is implemented, so that at least $90 \%$ of the bolts produced so far have their head central axis equipoised with the longitudinal axis of the shaft by $0.08^{\prime \prime}$.


A typical mechanical roofing bolt incorporates a 3-leaf mechanical expansion shell.
While installing, the expansion shell gets activated by employing torque over the nut end, thereby forcing the shell to expand and get engaged in the hole.

Anchor, originally expanded by the advance of the wedge at the top as the rod rotates, but then the sides grip the wall of the hole, and the anchor locks in place.

Threaded rod rotated through the nut on the outside of the bearing plate at the mouth of the hole.

## Benefits

- Enables a versatile system for rock reinforcements
- Renders immediate support for installing 300 mm from the face
- Easy installation and production time saving
- Cost effective support method
- Less prone to blast damage on the face
- Easily gets along-with mechanical equipment

