

When Should You Use A Hollow Steel Bar

If you're in an industry that requires the use of steel foundational equipment, it's imperative that you know what the different kinds of hollow steel bars are.

Hollow steel bars are completely threaded. They're known as "disposable" drill rods that are used to drill a special kind of hole. With the use of these drill rods, you can advance the drill string to your desired depth and then grout the drill string in place.

Using a hollow steel bar allows you to reinforce a portion of an anchor or pile with the steel. Steel bars are known for their durability, strength, and weldability. One downside of them is that they're known to lack the type of corrosion resistance that other kinds of bars provide. This can make it more difficult to use a hollow steel bar on specific kinds of projects.

In addition to their other uses, hollow steel bars can also be utilized as tie down anchors, soil nails, and micropiles, along with a large number of other challenging uses. With all of the different uses of hollow steel bars, they are a valuable tool to have on hand if you are a geotechnical contractor.

Types Of Drill Bits

With using a hollow steel bar, there are several different kinds of drill bits that are available for you to use.

The first kind of drill bit is known as a versatile cross cut bit. Aptly named, this drill bit can work on a wide variety of projects. This type of drill bit is best used in carbide or hardened steel.

If you're going to be drilling into intact rock, consider using a button bit instead. While this type of drill bit also works for hardened steel, it excels best with intact rock.

Lastly, use a stepped clay bit for any kind of cohesive soils that you may need to be drilling into.

Which drill bit you use highly depends on the kind of material that you're drilling through. In combination with the hollow steel bar, which drill bit you pick for your project is also determined on the borehole diameter. With a larger diameter of borehole, you'll have a higher load carrying capacity and you'll also have greater grout cover.

If you're not sure what grout cover is, it's used to protect the anchor rod from corroding. This is an extremely important part of the process as your structures will not hold if your anchor rods corrode too much. It is important to note that not each diameter bit will produce a parallel amount of a grout column. It is dependent upon the soil type. It is possible for a 3 inch diameter bit to produce a 6.5 to 9 inch diameter grout column depending on the soil type that you're working with.

Hollow Bar Corrosion Protection

Before using hollow steel bars, you should research how long it will take for the bar to corrode. Corrosion protection can be dependent on how aggressive the environment is where the steel bar is being placed. It can also depend on the installation methods.