

DTH BITS DESCRIPTION

Power Drill button bits cover a wide range, to suit all types of DTH hammers in a large variety of size 60 to 980 mm.

The bits are available with these features: flat, concave and convex face; spherical, ballistic, side buttons on the shoulders for all rock conditions and types.

Diameter, shape and steel can be customized on client's specific request, so to suit with any drilling conditions.

Our bits are manufactured from highly wear resistant steel, and equipped with carbide inserts of top quality to ensure longer life, performance and higher penetration rates.

BIT FACE DESIGN

Flat face

The flat face is very aggressive in drilling applications and is suitable best for very hard rock and hard rock broken formations. Used primarily in blast hole work, the bit tends to lead off in deep holes.

Flat Face bits are a general purpose bit that will work in all rock conditions but should be used especially for hard or abrasive conditions like granite, basalt, and hard limestone. Flat face bits are the best choice for drilling in a high silica environment.

Concave

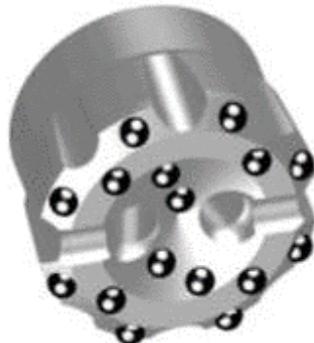
Conical concavity face gives excellent penetration in medium and hard rock formations, these face features will help drill straighter holes. This face has excellent air flushing characteristics. Concave is the predominate face style for the majority of drilling conditions and are designed for unconsolidated or broken rock.

Convex face

Convex face bits are designed for fast penetration rates in softer rock like shale and limestone with low silica content.



Flat face



Concave face



Convex face

TUNGSTEN CARBIDES SELECTION

Tungsten carbide is very important in button bits. They are available in various styles and models which is suitable for any drilling conditions. Our range has long lasting performance with effective operations.

All our carbide mining button tips are made from virgin raw materials and HIP sintered for the top good quality and high performance. Durable carbide buttons with excellent fracture resistance dramatically improve the service life with the high penetration rates.

These are manufactured using premium quality raw material, which is procured from certified vendors. The buttons fit the precisely drilled holes in the bit face with proper tolerance to keep the button in its place under severe drilling conditions, but with no exceeding stresses on the button itself that can lead to breakage.

The button shapes available are from standard spherical to optional ballistic or side buttons on the shoulders, for different rock formations.

Spherical

This button is the most common shape utilized in DTH Bits. This type of shape is the strongest and most resistant to breakage. The domed shape provides excellent penetration in medium rock, hard rock and hard rock broken formations, in all types of drilling. This is the standard button that will be quoted unless specified otherwise.

Ballistic

Normally this button is used in less hard consolidated drilling formations. This type of button is very aggressive and tends to drill very quickly. However, due to the ballistic shape it is prone to breakage if used in the wrong formations. Care should be used when drilling with this type button. Ballistic buttons do yield high penetration rates and efficient rock breakage.

Side buttons on the shoulders

All our bits are equipped with additional buttons on the shoulders.

These side buttons serve to guarantee less wear of the shoulders and to maintain the constant diameter of the hole for more time.



Spherical (dome)



Ballistic



**Side buttons on the
shoulders**