

SURFACE SET CORE BITS



Fordia's line of surface set core bits meets the needs of drilling companies operating in differing ground conditions. With a choice of diamond grades ranging from coarse to fine, and a variety of profiles, choosing the appropriate surface set core bit is now easier than ever.

The following chart describes the main grades of diamonds available. Please note that the grade represents the number of stones per carat (SPC) and not the quality of the stones. Other grades of diamonds are also available for custom orders.



CHART

Grade of Diamonds (SPC)	Soil Type	Mohs Hardness Scale
10/12 Synthetic Diamonds	Very Soft-Soft Gypsum, Talc	
15/20 Natural Diamonds	Very Soft Gypsum, Talc	
20/30 Natural Diamonds	Soft Schist, Sandstone	
30/40 Natural Diamonds	Soft-Medium Limestone, Dolomite	
40/60 Natural Diamonds	Medium Gabbro	
60/80 Natural Diamonds	Medium-Hard* Basalt, Diorite	

* To drill in hard to very hard ground, use an impregnated diamond crown instead. Contact your representative for more details.

Choose a synthetic diamond tool for a more economical solution or opt for a natural diamond if you need greater cutting ability. For drilling in hard to very hard ground, a diamond impregnated crown is always a good choice. Whatever the case, you can always count on one of our representatives to help you pick the best product for your needs.

PROFILES



SEMI-ROUND

Standard profile, ideal for most ground conditions



ROUND

Preferred profile for harder, abrasive ground conditions with rocks



STEP

A profile that provides a faster rate of penetration, but is a bit more fragile especially in fractured ground. Generally used with wireline core barrel systems.



PILOT

A profile that provides good stability, and a good rate of penetration and recovery. Ideal for soft to medium ground.



ANGLED PILOT

A very durable profile that provides good stability. Ideal for ground that is very fractured.



FACE DISCHARGE

A profile that helps in the recovery of core samples in very fragile ground.