



General Application Chart for Mineral Exploration Bits

Formation Type	Representative Rock Types	DCDMA Code	Mohs Hardness	UCS (MPa)	Drill Bit Type			
					Tungsten Carbide Bits	PCD (TSP) Set Bits	Surface-Set Diamond Bits	Impregnated Diamond Bits
Soft Fractured Abrasive	Plastic Clay, Gypsum	-	1		Yes	Yes	Yes	
	Sand, Marl, Soft Shale	-	2	2	Yes	Yes	Yes	
	Soft Sandstone, Calcite, Lignite, Frozen Soil, Sandy Limestone	-	3	5	Yes	Yes	Yes	
					Yes	Yes	Yes	
	Hard Clay, Shale, Soft Schist	-		10	Yes			
	Limestone, Sandstone, Siltstone, Fluorite	1	4	15	Yes			Yes
	Slate, Claystone, Apatite	2		20		Yes	Yes	
						Yes	Yes	
	Alluvial Deposits, Serpentine, Hard Sandstone	3		30		Yes	Yes	
						Yes	Yes	
Dolomitic Limestone, Norite Granite, Marble, Schist	4		40			Yes		
Granite, Dolomite, Mica Schist, Diorite, Diabase, Hematite, Magnetite, Syenite	5		60			Yes		
						Yes		
Quartz, Andesite, Conglomerates, Trachyte, Porphyry, Basalt, Gabbro, Gneiss, Pegmatite, Silicified Volcanics	6		80			Yes		
						Yes		
Hard Consolidated Non-Abrasive	Chert, Rhyolite, Banded Ironstone, Glassy Quartzite, Taconite	7	100				Yes	
							Yes	
			120				Yes	
			160				Yes	
			200				Yes	

The technical application data in this document is intended as a basic guideline for the selection of the appropriate tools for your job. As drilling conditions and the capabilities of drilling equipment vary considerably from site to site, it is impossible to define absolute parameters for the application of our drilling tools. Some experimentation on the part of the end user may be required as parameters outside those recommended in Dimatec's product literature may be applicable. Every effort has been made to ensure the accuracy of the data contained in this document. Dimatec Inc. cannot accept any liability due to errors or omissions in the data we provide. Dimatec Inc. is constantly working to improve our products and therefore reserve the right to make changes to materials, specifications, prices and technical data without prior notice.