

BIT SELECTION CHART

MOHS HARDNESS	ROCK HARDNESS	ROCK TYPE	ROCK FEATURES	BIT MATRIX SERIES											
				C1	C2	C4	C6	C7	C8	C9	C10	C11	C12		
1-3.5	 soft	Soapstone, Rock salt, Gypsum, Tuff, Fluorite, Calcite, Talc, Coal, Soft limestone, Soft sandstone, Siltstone, Shale, Potash, Claystone, Soft dolomite	FRAGMENTED ← → COMPACT ABRASIVE ← → NON-ABRASIVE												
															
3.5-6	 Medium hard	Hard shale, Alluvial deposits, Hard sandstone, Slates, Marble, Hard limestone, Apatite, Norite granite, Schist, Peridotite, Phyllites, Syenite, Serpentine,													
6-7	 hard	Gabbro, Dolomite, Mica schist, Diabase, Granite, Andesite, Tonalite, Diorite, Hematite, Magnetite, Silicified Volcanics, Porphyry, Trachyte, Anorthosite, Quartz													
7-7.5	 Very hard	Basalt, Gneiss, Taconite, Amphibolite, Rhyolite, Leptite, Conglomerate, Aplite, Silicified granite													
7.5-8	Extremely hard	Chert, Silicified rock, Pegmatite													
9	Ultra Hard	Ironstone, Quartzite, Pyrite rock Banded hematite, Sapphire													

NOTE:

*If the rock formation is abrasive, the bit matrix series should plus A became CIA to C12A.

**The abrasiveness maybe also depend on the grain-size and the rock consolidation.