

IMPREGNATED DIAMOND CORE BITS

Di-Corp works in partnership with you, the customer, to select or develop an impregnated diamond core bit that works with all your drilling requirements.

FEATURES & BENEFITS

Our team of experts have an in depth understanding of this complex product line and the know-how to maximize the performance and life of each bit. Each unique matrix is designed to cover a wide range of ground conditions including:

- soft to ultra hard formations (Mohs Hardness Scale - 1 to 10)
- abrasive* or non abrasive conditions
- competent, fractured or broken* formations

Di-Corp identifies each matrix with a T# so that it can be logged and kept indefinitely. Below is our currently selection chart which shows our standard offering. All bits are available in a multitude of sizes and waterway configurations.

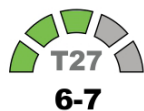
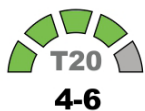
* As the abrasiveness and/or fractured and/or broken conditions increase, so does the amount of green shown on the gauge on the selection chart below.

ABRASIVE/COMPETENT GROUND CONDITIONS SCALE

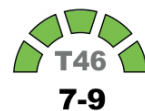
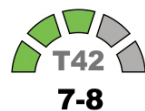
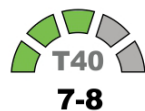
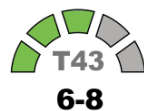


MEDIUM to HIGH torque and bit weight required

LEVEL 1

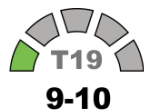
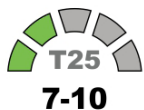
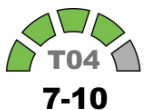


LEVEL 2



LOW to MEDIUM torque and bit weight required

LEVEL 3



WATERWAYS



IMPREGNATED DIAMOND CORE BITS



Each matrix is made up of premium materials to achieve maximum performance and life. This allows the bit to withstand the demands of the drill and the driller, including high penetration, and bit life.

BIT MATRIX	HARDNESS RANGE	DESCRIPTION
LEVEL 1		
T23	2 - 4	<ul style="list-style-type: none"> A tough matrix suited for very coarse, abrasive, competent and/or broken formations For use with high bit weight and high powered drills
T20	2 - 6	<ul style="list-style-type: none"> A tough matrix suited for coarse, abrasive, competent and/or broken formations For use with high bit weight and high powered drills
T27	6 - 7	<ul style="list-style-type: none"> A tough, freer cutting matrix suited for relatively non-abrasive, competent and/or broken formations Self stripping For use with high bit weight and high powered drills
LEVEL 2		
T07	6 - 8	<ul style="list-style-type: none"> A tough, free cutting matrix suited for very coarse, abrasive, competent and/or moderately fractured formations For use with medium to high bit weight and medium to high torque
T43	6 - 8	<ul style="list-style-type: none"> A tough, freer cutting matrix suited for very coarse, abrasive, competent and/or moderately fractured formations For use with medium to high bit weight and medium to high torque
T40	7 - 8	<ul style="list-style-type: none"> A soft, free cutting matrix suited for coarse, abrasive, competent and/or moderately fractured formations Self stripping For use with medium to high bit weight and medium to high torque
T42	7 - 8	<ul style="list-style-type: none"> A free cutting matrix suited for fine grained, low to moderate abrasive, competent and/or moderately fractured formations For use with medium to high bit weight and medium to high torque
T46	7 - 9	<ul style="list-style-type: none"> A tough, free cutting matrix suited for coarse, moderately abrasive, competent and/or moderately fractured formations For use with medium to high bit weight and medium to high torque
LEVEL 3		
T26	7 - 9	<ul style="list-style-type: none"> A tough, free cutting matrix suited for fine-grained, very abrasive, competent and/or compact formations For use with low bit weight and medium to high torque, as well as high penetration rates Most popular hard rock bit covering the largest range of conditions
T04	7 - 10	<ul style="list-style-type: none"> A tough, free cutting matrix suited for fine-grained, abrasive, competent and/or compact formations For use with low bit weight and medium to high torque, as well as high penetration rates
T25	7 - 10	<ul style="list-style-type: none"> A free cutting matrix suited for fine-grained, low to moderate abrasive, competent and/or moderately fractured formations Self stripping For use with medium bit weight and medium to low torque
T19	9 - 10	<ul style="list-style-type: none"> A free cutting matrix suited for medium to fine-grained, non abrasive, competent formations Self stripping For use with low bit weight and low to medium torque

Proper flushing is critical to maximizing bit performance and ensure no damaged occurs down the hole.

Di-Corp has standardized on three waterway configurations.

STANDARD Waterway

- N size bits and smaller
- competent, fine grained, abrasive and non abrasive formations
- geometry allows for maximum matrix volume and face contact area

WIDE Waterway

- N sized bits and larger
- more difficult conditions requiring increased fluid flow (coarse grained, fractured and broken)
- reduced contact area allows for increased penetration rates

SUPERFLUSH (Deep ID) Waterway

- N sized bits and larger, all triple tube bits
- difficult conditions where core sample is susceptible to washing and in lost circulation conditions where heavier muds are required (unconsolidated/broken formations)
- offers superior results over "Face Discharge" or "TT" with reduced core washing and material blockages

For more information on waterways see our catalogue or contact your sales representative.