TRI–CONE BITS IADC CLASSIFICATION

The code consists of four characters that indicate the design of the bit and the type of rock it is designed to drill. The first three characters are numeric, the fourth is alphabetic. The sequence of numeric characters is defined as "series – type – bearing/gage". The fourth letter character is defined as "additional characteristics".

The first digit of the code is cutting structure series (1–8). Eight categories of cutting structure series correspond to the general characteristics of the rocks for which the bit is intended for drilling. Series 1 to 3 define milled tooth bit, and series 4 to 8 define inserted bit. An increase in the series number within groups means an increase in the hardness of the rocks for which the bit is intended.

The second digit of the code is the bit type (1–4). Each series is divided into 4 types depending on the hardness of the rocks being drilled. Type 1 refers to bits for drilling the softest rocks within the series, and Type 4 refers to the hardest rocks within the series.

The third number (1–7) characterizes the design of the bearing and the presence (or absence) of carbide inserts on cone gages. Categories 8 and 9 are reserved for possible future use.

1. Series		2. Rocks		3. Bearing						
				1	2	3	4	5	6	7
Milled tooth	1	Soft	1	Open (unsealed) bearing	1 + drilling with air	1 + carbide inserts on cone gages	Sealed roller bearing	4 + carbide inserts on cone gages	rSealed journal bearing	6 + carbide inserts on cone gages
			2							
			3							
	2		4							
		Medium	1							
			2							
			3							
	3		4							
		Hard	1							
			2							
			3							
Carbide inserts	4	Soft	1							
			2							
			3							
			4							
	5	Medium soft	1							
			2							
			3							
			4							
	6	Medium	1							
			2							
			3							
			4							
	7	Hard	1							
			2							
			3							
			4							
	8	Tough	1							
			2							
			3							

BURINTEKH