

Lotus

ROCK DRILLING TOOLS & EQUIPMENT.



TRICONE ROCK BITS

PRODUCT CATALOGUE

www.lotushammers.com

High Quality Tricone Rock Bits

Pioneers in the industry, we offer Rock Roller Tricone Bits such as TCI Tooth Rock Roller Tricone Bit and Steel Tooth Rock Roller Tricone Bit from India.

Best international quality Rock Roller Bits are available in both TCI (Tungsten Carbide Inserts) & Milled Steel Tooth types in all sizes with different IADC Code manufactured as per API Standards, suitable for drilling Soft, Medium Hard & Hard formation.

We are instrumental in offering a broad array of Steel Tooth Rock Roller Tricone Bit that is manufacture by our experts, using quality approved raw material and advanced technology. The offered range is checked on various parameters by our quality inspectors. We offer this range in various sizes as per the needs of the clients. In addition to this, clients can avail this product at market price.



Steel Tooth & TCI

Tricone Rock Bits

Opened & Sealed Bearing Type.

Manufactured as per API Standards and specifications with superior quality steel, advanced technologies, designed for use with compressed air or fluid circulation systems. Regular and Jet circulation available. Cutting structures allow optimum penetration rates and long runs even in the most difficult and abrasive formations. Weight on the bits is distributed through a five anti-friction bearing matched and ground with precision to tolerance. Critical areas on the external portion of the bit are protected with the Tungsten Carbide Alloy hard facing. All sizes of Steel Tooth Tricone Bits are available for: Soft, Medium-Soft, Medium-Hard & Hard formations for Blast Hole & Water-well Drilling: Milled Steel Tooth Type & Tungsten Carbide Insert type.



TCI Stands for Tungsten Carbide Insert. These Tricones are designed for soft to very hard formations depending on the style and quality of the carbides on the drill bit, sealed bearing TCI Tricone bit or without gauge protection.

These are the best performing and longest lasting style of Tricone on the market. Sealed bearing will outperform open bearing. Gauge protection greatly increases the life of the drill bit. Open bearing Tricones can be gauge protected or not. These Tricone bits have exceptional value, good performance and low cost. Gauge protection greatly increases the life of the drill bit.



Steel Milled Tooth Tricone Rock Bits



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Mill tooth Tricone drill bits have very high drilling rates in soft formations. Tricone bits are hard faced the milled teeth so that they sharpen themselves while drilling. Milled tooth Tricone bits are designed for very soft to medium hardness formations. Sealed bearing milled tooth Tricone bit with or without gauge protection. These are the best performing and longest lasting style of Tricone on the market. Gauge protection increases the life of the drill bits.

BAILING VELOCITY TABLE																	
Delivered Air Volume CFM required for a Bailing Velocity of 5,000 FPM																	
PIPE SIZE		BIT SIZE															
In.	mm	4 3/4	5	5 1/8	5 5/8	5 7/8	6	6 1/4	6 3/4	7 3/8	7 7/8	9	9 7/8	10 5/8	12 1/4	13 3/4	15
		121	127	130	143	149	152	159	171	187	200	229	251	261	311	349	381
2 3/8	61	461	528	562	709												
		13.06	14.95	15.92	20.08												
2 7/8	73	390	456	491	638	716	756										
		11.04	12.91	13.91	18.07	20.28	21.41										
3	89	281	348	382	529	607	648	732	909	1149	1388	1875					
		7.96	9.86	10.82	14.98	17.19	18.35	20.73	25.74	32.54	32.54	53.10					
4	102	178	245	280	426	505	545	629	807	1047	1255	1773					
		5.04	6.94	7.93	12.06	14.30	15.43	17.81	22.85	29.66	35.54	50.21					
4 1/2	114							513	691	931	1139	1657					
								14.53	19.57	26.37	32.36	46.93					
5	127							383	561	802	1010	1526	1978	2397	3411		
								10.85	15.89	22.71	28.60	43.27	56.02	67.88	96.60		
5 1/2	140								418	668	867	1384	1835	2254	3268		
									11.84	18.63	24.55	39.19	51.97	63.83	92.55		
6 1/2	159									418	626	1144	1594	2013	3027		
										11.84	17.73	32.40	45.14	57.01	85.72		
6 5/8	168										495	1012	1463	1882	2896		
											14.02	28.66	41.43	53.30	82.01		
7	178											873	1323	1742	2756		
												24.72	37.47	49.33	78.05		
7 1/4	197											571	1022	1441	2455	3517	
												16.17	28.94	40.81	69.53	99.99	
8 5/8	219												631	1050	2064	3358	
													17.87	29.74	58.45	95.09	
9	229													870	1884	2946	
														24.64	53.35	83.42	
10	250															1366	2428
																38.69	68.75
10 3/4	273															941	2004
																26.65	56.75
																	84.54

To enhance gage holding and seal protection. Roller cone bits provide value with a variety of shirrtail protection packages for high-angle drilling, abrasive formation and steerable applications. Theses shirrtail protection packages can be used to tailor bits to meet your drilling needs.

Motor Hard facing (M feature) for demanding motor applications, a generous application of tungsten carbide hard facing is applied to the shirrtail lower edge and leading edge of the bit to provide enhanced seal protection.

Leading Edge Shirrtail Inserts (S feature) Tungsten Carbide Insert are placed along the leading edge of the shirrtail providing additional wear resistance in motor applications commanding high RPM or where additional shirrtail protection is needed.

Stabilization Inserts ® feature. Stabilization inserts enhance standard shirrtail patterns by providing bit stabilization and additional protection to the pressure compensator in high-angle applications or in deviation-prone formations.

Diamond Enhanced Shirrtail Inserts (Z feature) In premium shirrtail protection package PCD-Capped Inserts replaced tungsten carbide inserts (TCI) in strategic locations to provide maximum shirrtail protection in abrasive formations or directional application shirrtail protection. Motor Hardfacing – M Feature, Leading Edge & Hardfacing – S Feature

Stabilization and Hardfacing - ® Feature, Diamond Enhanced and Hardfacing – Z Feature.

Classification - IADC CODE



Standard Roller Bearing
(IADC xx1 or xx3)



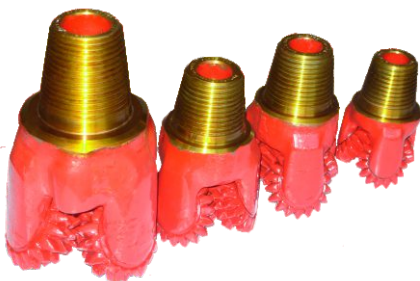
Roller Bearing Air
Cooled
(IADC xx2 or xx3)



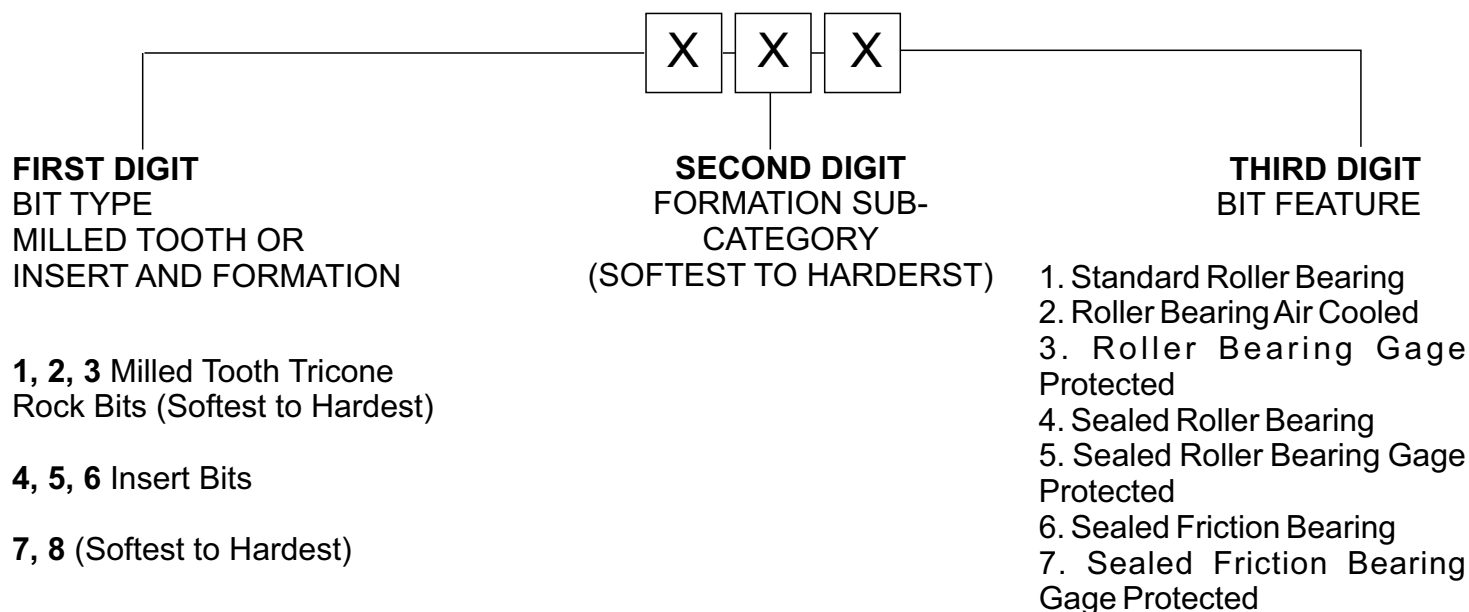
Sealed Roller Bearing
(IADC xx4 or xx5)



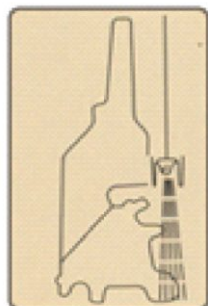
Sealed Friction Bearing
(IADC xx6 or xx7)



IADC CODE NUMBER



1. Centre Jet



Centre Jet is mounted at the centre of the bit. They are effectively used to prevent bit bailing in sticky formations. Available both in convergent and diffuser type.

2. Mini Extended Nozzle



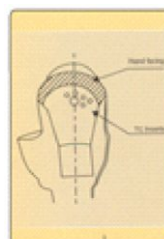
They are used to increase rate of penetration in soft to medium-soft formations. These nozzles keep the jet flow closer to the hole bottom. When the bit has mini-extended nozzles, ensure that the bit does not rest against the nozzles during makeup or breakout of bit.

3. Gauge Protection Inserts



These are profiled inserts pressed in the outer edge of the gauge face. These protect the gauge of the bit in abrasive formations. Gauge protection inserts are standard on TCI Bits.

4. Extended Shirt Tail & Ball Plug Protection



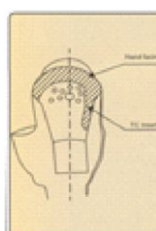
Tungsten Carbide inserts are pressed into the shirt tail area to provide extra protection of ball plug and shirt tail.

5. Air Circulation



This is available in milled tooth & TCI Bits to drill with air as a circulation media. Some part of air flow is utilized to clean & cool the bearings.

6. Body & Shirt Tail Protection



Additional protection to the leg body & shirt tail whilst drilling in abrasive formations & in the directional drilling applications.



Availability of Tricone Rock Bits

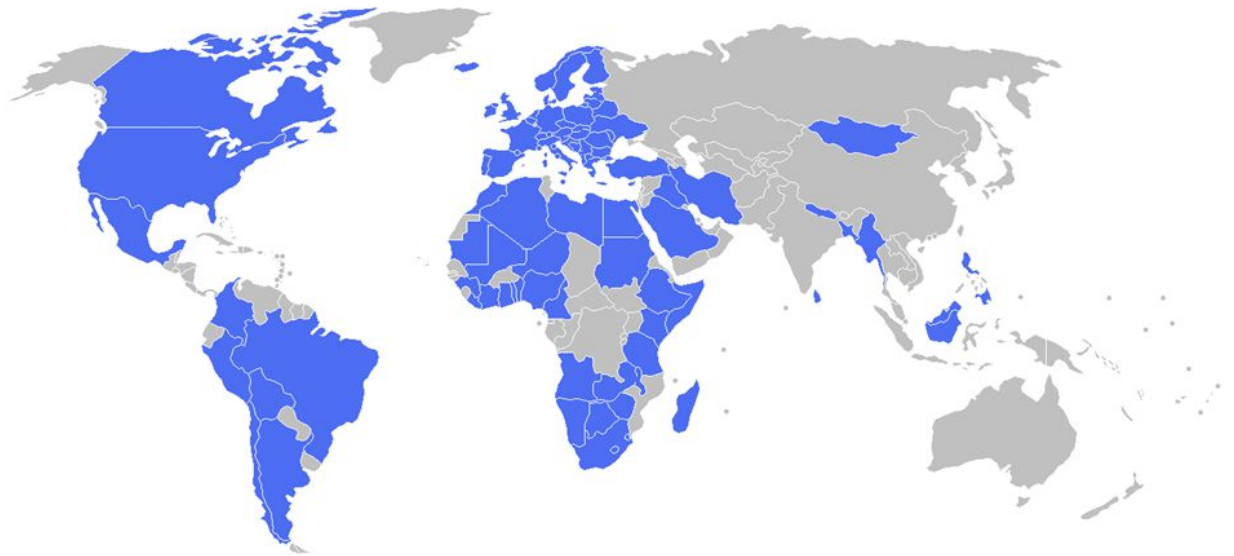
SR. NO.	BIT SIZE	FORMATION	API PIN CONNECTION	AVAILABILITY OF TRICONE ROCK BITS			
				TCI BITS		STEEL TOOTH BITS	
				OPEN BEARING	SEALED BEARING	OPEN BEARING	SEALED BEARING
1	2 7/8" with N Rod	SOFT/MED/HARD	N Rod (4 TPI) or AW	-	-	v	-
2	3 7/8"	SOFT/MED/HARD	2 3/8" Regular	-	-	v	-
3	4 1/4"	SOFT/MED/HARD	2 3/8" Regular	-	-	v	-
4	4 1/2"	SOFT/MED/HARD	2 3/8" Regular	-	-	v	-
5	4 3/4"	SOFT/MED/HARD	2 7/8" Regular	v	-	v	-
6	5 5/8"	SOFT/MED/HARD	3 1/2" Regular	v	-	v	-
7	5 7/8"	SOFT/MED/HARD	3 1/2" Regular	-	-	v	-
8	6"	SOFT/MED/HARD	3 1/2" Regular	-	-	-	-
9	6 1/4"	SOFT/MED/HARD	3 1/2" Regular	v	v	v	v
10	6 3/4"	SOFT/MED/HARD	3 1/2" Regular	v	v	v	v
11	7 5/8"	SOFT/MED/HARD	4 1/2" Regular	-	-	v	-
12	7 7/8"	SOFT/MED/HARD	4 1/2" Regular	v	-	v	-
13	8 1/2"	SOFT/MED/HARD	4 1/2" Regular	v	v	v	v
14	8 3/4"	SOFT/MED/HARD	4 1/2" Regular	v	v	v	v
15	9 5/8"	SOFT/MED/HARD	6 5/8" Regular	-	-	v	-
16	9 7/8"	SOFT/MED/HARD	6 5/8" Regular	v	v	v	v
17	10 5/8"	SOFT/MED/HARD	6 5/8" Regular	v	v	v	v
18	12 1/4"	SOFT/MED/HARD	6 5/8" Regular	v	v	v	v
19	13 3/4"	SOFT/MED/HARD	6 5/8" Regular	v	v	v	v
20	14 3/4"	SOFT/MED/HARD	6 5/8" or 7 5/8" Reg	-	v	v	v
21	15"	SOFT/MED/HARD	6 5/8" or 7 5/8" Reg	-	v	v	v
22	17 1/2"	SOFT/MED/HARD	6 5/8" or 7 5/8" Reg	v	v	v	v

Note: Some of the Tricone Bits are partly traded by lotus.

We provide ourselves on the quality of our process and product. Our Quality Motto "Customer Delight"

As a Global supplier to drilling industries, we are proud to offer next generation Tricone rock drill bits manufactured are per API Standards with latest CNC Machines. These Tricone Bits are designed for taking higher loads and to have excellent penetration rate for any formation. Tricone Bits are available in form of Milled Tooth and Tungsten Carbide Insert Bits.

Global Presence: Exporting to 32 countries from 15 years



OTHER PRODUCTS INCLUDE:

- DTH HAMMERS
- BUTTON BITS
- THREADED BUTTON BITS
- DRILL RODS
- WATER WELL PVC CASING PIPES
- GEOTHERMAL & ENVIRONMENTAL PRODUCTS

Kamal Import Exports Inc.

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