

IADC Code Roller Cone Comparison Chart

Series	Formations	Types	1 - Open Bearing				4 - Sealed Bearing				5 - Sealed Roller bearing With Gauge				6 - Friction Bearing				7 - Friction Bearing With Gauge Protection			
			JZ	Smith	Hughes	Reed	JZ	Smith	Hughes	Reed	JZ	Smith	Hughes	Reed	JZ	Smith	Hughes	Reed	JZ	Smith	Hughes	Reed
Milled Tooth Bits	Soft formations having low compressive strength and high drillability	1	W111	DSJ	R1	Y11	GA114	SDS	GTX-1		GA115, GJ115, GAT115, GJT115	MSDSH, MSDSSH, GGSSH+, MGS+	GTX-G1, MAX GT1, MX-1	T11, EMS11G	HA116	FDS, FDSS+	GT1	TD11, EHT11, HP11	HA117, HAT117, HJ117, HJT117	MFDSh, FDSH+, MFDSSH, FDS+2, FDS+2, FGS+2, FGS+2, FGS+2, FGS+2, FGS+2, FGS+2, XR+, FGS+2, FGS+	XLX-1, GT-GH1H, GT-G1, STX-1, MX-1, STR-1	D11, EHT11G, SL11, TC10, TC11
		2	W121	DTJ			GA124				GA125, GAT125				HA126			EHT12, HP12	HA127, HAT127, HJT127			SL12
		3	W131	DGJ	R3	Y13	GA134	MCG+	GTX3		GA135, GAT135	SDGH, MSDGH, MGGH+	GTX-G3, MAX-GT3, MX-3	T13, EMS13G	HA136			HP13	HA137, HAT137, HJ137, HJT137	FDGH, MFDH	MX-3	D12, TD13G, EHT13G, HP13G
	Medium to medium hard formations with high compressive strength	1		V2J			GA214				GA215	SVH, MSVH			HA216		ATJ4		HA217	FVH	ATJ-G4	HP21G
		2			DR5																	
	Hard semi-abrasive and abrasive formations	1		LH1		Y31																
		2			R7																	
		3	W321																			
	Soft formations of low compressive strength	1									GA415, GJ415, GAT415, GJT415	MGS01, 01GMS, 02MG, MG02T, MG04, MGS04, G04	GTX-00, GTX03, MAXGT-00, MAXGT-03, MX-00, MX-03						HA417, HAT417, HJ417, HJT417	F02T	GT-00, GT-03, H-03, STR-03, MX-00, MX03	TD41A, TD41H, TD41, EHP41, EHP41A, EHP41H, HP41A, HP41H
		2										MGS05, 05GM, G05	GTX-03C						HA427Y, HAT427Y, HJT427Y	06MF, F05, F07, MF05T, GF05	STR-05C, HX05C	TD42H, EHP42H
		3									GA435, GJ435, GAT435, GJT435	M10T, MGS10, MG10T, 10GM, G10	GTX-09, GTX-11H, MAXGT-09, MX-09, MX-11						HA437, HAT437, HJ437, HJT437, YA437	10GF, F1, F10T, F12T, MF10T, XRO1T	GT-09, STR-09, STX-09C, STX-09H, H-09, MX-09, MX-09H, MKS-09CG, MX-11, MX-18C	TD43A, TD43H, SL43H, TD43, EHP43, EHP43A, EHP43H, HP43, D43
		4										M15T, 15GM, G15, MGS18, G18							HA447, HAT447, HJ447, HJT447	F15, MF15, MF14TY, 15MF, FG15T, FGS15, 15GF, GF15, XR15, GF18	GT-18, STR-18, H-18, H-18H, HX-18, MX-18H	D44, TD44H, EHP44, DHP44H, HP44, HP44H, HP44X
Soft to medium formations of high compressive strength	1									GA515, GJ515, GAT515, GJT515	MA1SL, M20T, MGS20, 21GMS, 20GM, G20								HA517, HAT517, HJ517, HJT517, YA517	F15H, F17, F2, F20T, MF2, MF20T, FGS20T, 20MF, F25, MF25T, 25MF, FG20T, FGS20, GF20, 20GF, 25GF, XR20, XR25	GT-20, STR-20, STX-20, H-20, HX-20, MX-20, MX20H	TD51A, TD51H, TD51X, SL51H, EHP51, EHP51A, EHP51H, HP51, HP51A, HP51H, HP51X, D51
	2																		HA527, HAT527, HJ527, HJT527, YA527	F26Y, F27, MF27, FGS260D, 26GFD, XR20TY, XR25TY	GT-20C, H-20C, HX-28, HX-28C, MX-20C, MX-28	TD52, TD52A, TD52I, TD52X, EHP52, HP52, HP52A, HP52X
	3									GA535, GJ535, GAT535, GJT535									HA537, HAT537, HJ537, HJT537, YA537	F3, MF3, F3H, FG3H, F30T, 30MF, XR32TD, XR30	L-30A, STR-30, STX-30, STX35, GT-30, H-30, HX-30, MX-30, MX-30H	TD53, TD53A, SL53A, SL53, EHP53A, EHP53, EHP53H, HP53, HP53A, HP53H, HP53B, HP53IA, D53
	4																		HA547Y, HAT547Y, HJ547Y, HJT547Y	F35, F37, MF37, XR30Y, 30MFDY	GT-30C, STR-30C, STR-35C, STX-30C, H-30C, HR-38C, HR-30C, HR-35, MX-35C	TD54A, TD54X, HP54, HP54A, HP54X
Medium hard formations of high compressive strength	1									GA615, GJ615	4JS								HA617, HAT617, HJ617, HJT617	F4, F45H, F47, F47A, F4H, XR40	STR-40, HR-40, HR-44, STX-40, M-40, MX40G	TD61, TD61A, SL61, SL61A, EHP61, EHP61A, HP61, HP61A, HP61H
	2									GA625Y	5JS, 47JS								HA627, HAT627	F47H, F5, MF5, XR40Y, XRY45YDD, XR50	XL-40A, STR-40C, STR-44C, STC-44C, HR-40C, HR-44C, MX-40C, MX-44CH	TD62, TD62A, SL62, SL62A, HP61, HP62A, HP62H, HP62H, HP63, HP64, HP62JA
	3										M57S								HAT637Y, HAT637Y	F57, MF57, XR50Y	XL-50A, STR-50, STX-50, HR-50, HR55RG, GR-55, MX-50, MX-55	TD63, EHP63, HP63
	4																		HA647Y, HAT647Y	F59, F59Y, F65, F67, F67Y	HR-60, HR-66	TD64, TD64H, HP64, HP64A, HP64H
Hard semi-abrasive and abrasive formations	1																					
	2																					
	3									GA735									HA737, HJ737	F7, XR68Y, XR70Y	STR-70, STX-70, HR-70	TD73, SL73, HP73
	4																				TD74, SL74, HP74	
Extremely hard and abrasive formations	1																			FB, FBOY		TD81, HP81
	2																			F8SY		
	3																		HA837, HJ837	F9, F90Y, SR90Y		TD83, SL83, EHP83, HP83

