COMPARISON CHART GRADES FOR MILLING

WIDIA

DIN ISO 513		WIDIA		INGERSOLL		ISCAR		KENNAMETAL		MITSUBISHI		PLANSEE TIZIT		SAFETY		SANDVIK CORAMANT		SECO TOOLS		STELLRAM		SUMITOMO		TOSHIBA TUNGALOY		VALENITE		WALTER	
		Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated	Coated	Uncoated
Wear resistance ▲▲▲▲ Toughness ▼▼▼▼	P01-P10 C8	TN2505		IN2006		IC903		KC792M								GC1025				SP1064						VP5007			
	P10-P20 C7	TN6415 TN2510 TN6527		IN2004 IN2006 IN6520		IC520M IC900 IC903 IC908 IC950 IC1010 IC4100		KC633M KC635M KC637M KC715M KC732M					TCM10			GC1030 GC4020				SP4036 SFZ		AC230		AH120		SM225		WAK25 WXH15 WXM15 WXK15	
	P20-P30 C6	TN7525 TN2525 TN6435 TN6525	TTM TMRS	IN1030 IN2015 IN2030 IN2035 IN6520 IN6530		IC250 IC928 IC328 IC1010 IC520M IC4050 IC900 IC4100 IC908 IC4400	IC50M	KC522M KC525M KC625M KC725M	K125M	F7030 VP15TF UP20M	UTi20T	SR226+	S25T	PX25 KR15 KX15		GC4020		T200M T25M F25M		MP91M X400	SF30	ACZ330	A30N	AH330 GH330 T3030		VP5020 VC935		WAP25 WKP25	WPM
	P30-P40 C5	TN7535 TN7435 TN450	TTR	IN0545 IN1030 IN2015 IN2030 IN2035 IN2040 IN6530		IC250 IC300 IC328 IC528 IC635 IC900 IC928 IC4050 IC4400	IC28	KC522M KC525M KC625M KC725M	GX K600	VP30RT		CTP1235 GM43+		OR5000 PR40 PX40	SY3	GC4030 GC4040 GC4240		F30M F60M T250M		PFZ SP6564 SP5464	X44	ACZ350		T3030 T325		VP5040 VP5035		WAP35 WKP35 WTP35 WXM35 WQM35	
	P40-P50 C5	TN6540		IN0545 IN6530		IC300 IC328 IC528 IC635 IC928 IC4050 IC4400	IC28	KC530M				SM80				GC4240		T350M F40M		X500	SU5400					SM245		WXP45 WQM45	
	M10-M20	TN6415		IN2005 IN2006	IN05S	IC520M IC903	IC07	KC633M KC792M								GC1030				MP91M SP4036 SP1064	GH1	EH20Z		AH120		VC902 VC912	VC2	WXM15	
	M20-M30	TN6435 TN6525 TN7525 TN25M	TTM TMRS	IN1030 IN2005 IN2030 IN2035 IN6520 IN6530	IN30M	IC250 IC300 IC635 IC900 IC908 IC4050 IC4400	IC08 IC20 IC28	KC522M KC525M KC715M KC725M KC925M	K125M K600	F7030 VP15TF UP20M	UTi20T	CTP2135 GM43+		PX25 KR15 KX15		GC2030		T250M T25M F25M		SFZ PFZ		ACZ350	A30N	AH330 AH140		SM225 VP5020	VC29	WXM15	
	M30-M40	TN450 TN6540 TN7435 TN7535	TTR	IN1030 IN2015 IN2030 IN2035 IN6520 IN6530	IN30M	IC250 IC300 IC328 IC635 IC928	IC28	KC735M KC930M		VP30RT		GM246 SM80		OR5000 PR40 PX40		GC2040 GC4040		F30M F40M T350M		X500 SP6564						VP5040 VP5035 SM245		WTP35 WXM35 WQM35 WQM45	
	K01-K10 C4	TN5505 TN2505	THM-F THM-U			DT7150 IC900 IC1010 IC4100				F5010	HTi10														TH10	VP5007			
	K10-K20 C3	TN5515 TN2510 TN5415 TN6415 TN6510	THM	IN1030 IN2004 IN2010 IN6510	IN04S IN10K	DT7150 IC900 IC950 IC1010 IC4010 IC4100	IC20	KC510M KC515M KC915M	K313 K110M K115M	F5010 F5020		SR216	H216T	KR15 KX15	M10	GC3020		T150M		MP91M SC3025 SP4036 SP1064	GH1	AC211 EH20Z	G10E	T1015 AH120	TH10 TU10	VP1120 VC902 VC912 SM307	VC2	WAK15 WXH15 WXM15 WXK15	WKM
	K20-K30 C2	TN5520 TN6435 TN6520 TN6525	THR TMRS	IN1030 IN2040 IN2004 IN6515 IN2015 IN6530 IN2035 INDD15	IN15K IN30M	IC520M IC900 IC908 IC928 IC4010 IC4050		KC520M KC522M KC525M KC625M KC725M KC925M KC930M	KMF K600	VP15TF	UTi20T	SR226+		KX20	M15S	GC3040 GC4020	H13A	T200M	HX	X500 SP5464 SFZ		ACZ310	EH20	T1020		VP5020 SM318	VC29	WAK25 WAP25 WKP25 WQK25	
	K30-K40 C1	TN6540 TN7435		IN2015 IN2035 IN2040 IN6530 INDD15		IC908 IC928 IC4050			KMF							GC3025 GC4035	H13A	CP500	883	NL40 NL92						SV525 SV325 SV230			WK30 WK40
	N05-N10	TN6501 TN6502	THM-U				IC20	KC410M	K313											SFZ	GH1				KS05F				
	N10-N20		THM			IC908	IC08 IC20 IC28	KC510M KC631M KC635M	K110M		HTi10	AMZ	H216T			GC1025	H10	F15M F17M	H15		GH2		H1				VPUK20	WXN15 WXK15	WK10 WKM
	N20-N30		THR TMRS			IC908	IC28	KC637M	KMF K600							GC1030	H13A		HX H25							VP5020	VPUK20		WMG30
	N30-N40																												WMG40
	S05-S10						IC20		K313																	VP5007			
	S10-S20		THM			IC300 IC900 IC903 IC908	IC07 IC08	KC510M KC633M	KMF							GC1025		T250M		SP6564 SFZ	SF30	EH10Z	EH10						
	S20-S30		THR TMRS			IC300 IC328 IC900 IC908 IC928	IC07 IC08 IC28	KC522M KC725M KC925M KC930M KC625M	K600	VP15TF		GM246				GC1030 GC2030	H13A	T350M T25M	HX H25	X500		EH20Z	EH20					WXM35 WQM35	WMG30
	S30-S40					IC928										GC2040		F40M										WTP35 WXP45 WMG40	
	H05-H10	TN2505				IC903	IC20		K313											SP4036						VP5007			
	H10-H20	TN2510 TN2525	THM			IC900 IC908		KC637M KC635M KC637M	KMF							GC1025 GC3020		F15M T200M		SFZ								WXH15 WXK15	
	H20-H30	TN2525				IC900 IC908		KC522M								GC1030 GC3040 GC4020		F30M		MP91M X400						VP5020			
	H30-H40																												