Characteristics of Carbide Grade

Application	Dijet Grade Code	Range	Density	Hardness	Transverse Rupture Strength	Fracture Toughness	Young's Modulus	Coefficient of Thermal Expansion	Coefficient of Heat Conductivity
				HRA	GPa	MPa√m	GPa	x 10^{-6}/k	W/m•k
Cermet (TiCN Class)	LN10	P01 ~ P10, M10 K01 ~ K10	7.2	93.0	1.7	7.9	440	7.9	21
	CX50	P10 ~ P20	6.7	HV:22.6GPa 92.0	1.8	8.0	430	7.9	29
	CX75	P10 ~ P20 M10 ~ M20	6.8	92.1	2.2	9.0	430	7.9	29
	CX90	P20 ~ P30, M30	6.9	91.6	2.5	10.0	430	8.0	31
	CX99	P30, M30	7.4	91.0	2.4	11.5	430	8.0	34
Carbide (P Class)	SRT	P10 ~ P20	12.0	92.0	1.6	9.6	520	5.9	33
	SR20	P20	11.7	91.5	1.7	10.5	520	5.9	33
	DX30	P20 ~ P30	12.1	91.5	2.0	11.0	530	5.5	59
	DX35	P30 ~ P40	12.0	90.8	2.2	12.0	530	5.5	59
	SR30	P30 ~ P40	13.3	90.5	2.0	11.5	530	5.5	59
Carbide (M Class)	UMN	M10	11.7	91.5	1.7	10.5	520	5.9	33
	DX25	M20	12.4	91.0	1.9	10.9	510	5.4	63
	UMS	M20 ~ M30	13.3	90.5	2.0	11.5	530	5.5	59
	UM40	M40	13.3	88.0	2.5	14.0	530	5.0	71
Carbide (K Class)	KG03	K01	15.0	93.0	1.8	9.0	650	4.8	88
	KG10	K10	15.0	92.5	2.1	10.4	630	4.9	80
	KT9	K10 ~ K20	14.9	92.5	2.0	10.1	630	4.9	80
	CR1	K10 ~ K20	14.7	92.0	2.2	10.7	610	5.0	75
	KG20	K20	14.8	91.5	2.3	11.4	620	5.1	75
	KG30	K30	14.7	90.0	2.6	14.3	590	5.3	71
Carbide (N Class)	KT9	N10 ~ N20	14.9	92.5	2.0	10.1	630	4.9	80
	CR1	N10 ~ N20	14.7	92.0	2.2	10.7	610	5.0	75
Carbide (S Class)	KG10	S10	15.0	92.5	2.1	10.4	630	4.9	80
	KG20	S20	14.8	91.5	2.3	11.4	620	5.1	75
Carbide (H Class)	KG03	H01	15.0	93.0	1.8	9.0	650	4.8	88
	FZ05	H10	14.8	93.0	3.3	9.0	630	4.9	76
Micro Grain Carbide	FB05	K01	14.4	93.8	3.3	8.3	590	5.1	55
	FB10	K01	14.0	93.5	3.5	9.5	550	5.6	50
	FB15	K10 ~ K20	14.0	92.0	3.6	11.0	540	5.7	52
	FB20	K20 ~ K30	13.6	91.5	3.8	12.0	500	6.2	44
	FZ05	K01, S10, H10	14.8	93.0	3.3	9.0	630	4.9	76
	FZ10	K10	14.6	92.4	3.7	10.2	600	5.2	70
	FZ15	K10 ~ K20 S20, H20	14.4	91.8	4.0	11.5	570	5.4	63
	FZ20	K20	14.2	91.2	4.1	12.5	550	5.6	60