

XCAL INDUSTRIES Powder Grades

Grade	US Class	ISO Class	Hardness	Density	WC	Co	Other	Grain Size
TYPICAL VALUES								
Metal Cutting Grades								
T100/Ramet	C1	K30	91.5	14.50	89.5	10.0	0.5	Ultra Fine
T1	C1	K10/K25	91.4	14.73	92.0	8.0	0.0	Fine
T4	C4	K40	93.0	15.15	96.0	4.0	0.0	Fine
T10	C1	K20	89.8	14.30	87.0	10.0	3.0	Fine
T13	C1	K40	89.7	14.35	88.0	11.0	1.0	Fine
T14	C1	K40	90.0	14.05	85.0	12.0	3.0	Fine
T20	C2	K20	92.4	14.70	90.0	6.0	4.0	Fine
T22	C2	K20	92.0	14.95	94.0	6.0	0.0	Fine
T23	C3	K20	93.0	14.95	94.0	6.0	0.0	Ultra Fine
T24	C1	K20/K30	93.3	14.70	93.0	6.4	0.6	Fine
T28	C2/C3	K10	92.5	14.90	88.5	5.5	6.0	Fine
T50	C5	P50/M50	91.3	12.52	78.0	8.5	13.5	Medium
T52	C5	P40/M40	91.0	12.92	78.5	11.5	10.0	Fine
T54	C5	P50/m50	90.2	13.10	71.0	13.0	16.0	Medium
T55	C5	P40/M40	91.4	12.52	69.0	10.5	20.5	Medium
T56	C5	P35/M35	91.4	12.70	74.0	9.5	15.5	Medium
T60	C6	P15/M15	91.7	12.60	80.0	7.5	12.5	Fine/Medium
T70	C7	P10	92.1	11.95	67.0	6.5	26.5	Fine
T111	C1	K20/K30	91.4	14.43	88.5	11.0	0.5	Ultra Fine
T150	C1	K40	90.1	13.95	85.0	15.0	0.0	Ultra Fine
TUF XCAL Ultra Fine Grain								
TUF306	C2/C3	K05/K10	93.5	14.92	93.5	6.0	0.5	Ultra Fine
TUF108	C1/C2	K20/30	93.0	14.65	91.5	8.0	0.5	Ultra Fine
TUF110	C1/C2	K20/30	92.3	14.50	89.5	10.0	0.5	Ultra Fine
TUF112	C1	K30/40	91.8	14.30	87.5	12.0	0.5	Ultra Fine
Substrate Grades								
650S	C5	P40/M40	91.0	13.35	82.1	8.5	9.4	Medium
660S	C2/C5	P30/K30	91.6	13.60	84.6	6.0	9.4	Fine/Medium
670S	C5	P15	91.9	13.30	82.5	6.5	11.0	Medium
690S	C6	P15	92.3	14.33	85.1	5.5	9.4	Fine
Wear and Special Grades								
T21	C1/C2	K10/K20	91.5	14.80	90.0	10.0	0.0	Fine/Medium
TF78	C6/C7	P10/P20	92.6	13.40	86.0	8.0	6.0	Fine
T57	C15A	N/A	87.0	12.91	67.0	13.0	20.0	Medium
Mining								
TM6	C10	N/A	90.0	14.95	94.0	6.0	0.0	Medium
TM8	C13	N/A	89.2	14.72	92.0	8.0	0.0	Medium/Coarse
TM9	C13	N/A	88.7	14.63	91.0	9.0	0.0	Medium/Coarse
TC105	C13	N/A	87.5	14.50	89.5	10.5	0.0	Coarse
TM12	C14	N/A	88.5	14.33	88.0	12.0	0.0	Medium/Coarse
TC135	C14	N/A	86.2	14.18	86.5	13.5	0.0	Coarse
TM14	C14	N/A	86.7	14.10	86.0	14.0	0.0	Medium/Coarse
TM15	C14	N/A	87.5	14.03	85.0	15.0	0.0	Medium/Coarse
TC17	C14	N/A	85.7	13.85	83.0	17.0	0.0	Coarse
TM18	C14	N/A	86.6	13.75	82.0	18.0	0.0	Medium/Coarse