



TIRUPATI CARBON PRODUCTS PVT LTD

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Mechanical Carbon Grades

Grade	Equivalent	Hardness scleroscope	Bulk density	Transverse bend strength		Compressive strength		Shear strength		Dynamic Elastic modulus		Porosity (apparent)	Coefficient of thermal expansion	Thermal Conductivity	
			kg/m ³ x 10 ³	kgf/cm ²	lbf/in ²	kgf/cm ²	lbf/in ²	kgf/cm ²	lbf/in ²	kgf/cm ² x 10 ³	lbf/in ² x 10 ⁶			%	·C ¹ x 10 ⁶
CARBON - GRAPHITES															
TY1	CY1	60	1.70	280	4000	840	12000	210	3000	180	2.6	12	3.4	0.03	12.0
Application	Steam turbine rings														
TY2	CY2	60	1.70	315	4500	1020	14500	210	3000	180	2.6	12	3.4	0.03	12.0
Application	Bearings & sealing rings														
TY9	CY9	W 55 T 50	1.60	390 280	5500 4000	740 620	10500 8800	200 140	2800 2000	170 112	2.4 1.6	15	1.3 4.0	0.25 0.15	105.0 65.0
Application	Bearings & metallurgical applications														
TY10	CY10	67	1.60	460	6500	1400	20000	320	4600	180	2.6	15	3.6	0.03	13.0
Application	Bearing, piston & sealing rings & vanes														
TY24	CY24	65	1.55	360	5130	1160	16530	239	3400	180	2.6	18	3.0	0.035	14.7
Application	Sealing & water turbine rings														
TY115	CY115	W 67 T 63	1.70	410 330	5750 4650	1360 1160	19500 16500	240 250	3480 3630	217 -	3.1 -	12	2.4 5.0	0.03 0.02	13.0 8.0
Application	Furnace & metallurgical applications														
TY9106	CY9106	90	1.60	422	6000	1620	23000	325	4650	150	2.1	13	4.2	0.02	9.0
Application	Sealing rings														



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IMPREGNATED GRADES															
TCY2C	CY2C	80	1.84	560	8000	1830	26000	310	4400	240	3.4	1	4.5	0.03	12.0
Application	Bearings, gland & sealing rings														
TCY2T	CY2T	60	1.70	315	4500	1020	14500	210	3000	180	2.6	4	3.4	0.03	12.0
Application	Water turbine rings														
TCY2W	CY2W	74	1.84	350	5000	1270	18000	250	3500	140	3.0	1	4.2	0.03	12.0
Application	Gland & Sealing rings														
TCY2WA	CY2WA	80	1.83	530	7500	1690	24000	300	4300	140	3.6	1	4.2	0.03	12.0
Application	Sealing rings														
TCY9BY	CY9BY	W 60 T 58	1.70	440 320	6300 4500	810 650	11500 9200	210 175	3000 2500	175 125	2.5 1.8	13	1.5 4.3	0.25 0.20	105.0 84.0
Application	Vaness														
TCY9C	CY9C	W 75 T 73	1.75	620 420	9800 6000	1400 1125	20000 16000	320 240	4500 3400	200 90	2.9 1.3	2	2.3 4.3	0.28 0.18	118.0 78.0
Application	Bearings														
TCY10C	CY10C	83	1.80	650	9300	2100	30000	460	6500	230	3.3	2	4.0	0.03	12.0
Application	Bearings, piston, sealing & steamjoint rings & vanes														
TCY10F	CY10F	70	1.65	540	7680	1400	20000	340	4800	200	2.9	13	3.8	0.03	12.0
Application	Piston rings and vanes														
TCY10W	CY10W	78	1.75	530	7500	1620	23000	380	5400	220	3.1	1	3.8	0.027	11.0
Application	Piston & sealing rings														
TCY10WA	CY10WA	84	1.80	700	10000	2150	30500	399	5500	210	3.0	2	4.2	0.03	12.0
Application	Piston & sealing rings														
TCY24C	CY24C	83	1.75	670	9500	2110	30000	440	6300	220	3.2	2	4.3	0.04	15.6
Application	Bearings & sealing rings														
TCY25C	CY25C	84	1.80	665	9500	2100	30000	460	6500	215	3.1	1	4.8	0.03	13.8
Application	Sealing rings														
TCY29C	CY29C	82	1.80	700	10000	2100	30000	350	5000	225	3.2	2	5.4	0.04	17.0
Application	Bearings														
TCY31C	CY31C	84	1.75	700	10000	2100	30000	422	6000	225	3.2	2	4.0	0.03	13.0
Application	Sealing rings														
TCY103	CY103	75	1.80	600	8500	1410	20000	316	4500	225	3.2	2	4.2	0.04	17.0
Application	Pressed-to-shape bearings & sealng rings														
TCY9106C	CY9106C	100	1.70	600	8600	2140	30500	440	6300	210	3.0	2	4.5	0.02	9.0
Application	Bearings & sealing rings														
TEY9106BY	EY91068Y	50	1.78	350	5000	700	10000	210	3000	91	1.3	12	4.5	0.14	60.0
Application	High temperature bearings														
TCNFJ	CNFJ	84	1.82	650	9300	2100	30000			230	3.3	1	5.2	0.03	13.8
Application	Sealing rings														
TCCAJ	CCAJ	100	1.80	670	9500	2650	38000			280	4.0	1	2.7	0.02	10.4
Application	Bearings & sealing rings														
TCDJ-83	CDJ-83	95	1.76	620	8800	2550	36300			225	3.2	5	2.2	0.02	8.7
Application	Sealing rings in aircraft Industry														
TCJPS	CJPS	60	1.77	560	8000	1820	26000			150	2.1	5	3.0	0.06	26.0
Application	High temperature sealing rings														
TCY106	CY106	100	1.90	580	8200	2360	33500	510	7300	225	3.2	3	5.0	0.02	9.0
Application	Sealing rings in arduous chemical conditions														
TEY105	EY105	64	2.00	490	7000	1400	20000	370	5300	210	3.0	2	5.4	0.12	50.0
Application	Sealing rings in arduous chemical conditions														



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ELECTROGRAPHITES															
TEY1	EY1	W 31 T 32	1.65	180 130	2600 1800	300 270	4300 3900	105 98	1500 1250	120 50	1.7 0.7	21	1.7 3.5	0.33 0.25	138.0 105.0
Application	Furnace & metallurgical applications														
TEY4	EY4	W 45 T 40	1.70	280 154	4000 2200	490 280	7000 4000	140 130	2000 1850			17	3.0 4.0	0.25 0.20	105.0 84.0
Application	Continuous casting dies														
TEY9	EY9	W 50 T 43	1.65	245 200	3500 2800	490 390	7000 5600	175 140	2500 2000	105 56	1.5 0.8	20	1.3 4.2	0.20 0.13	84.0 55.0
Application	Bearings & metallurgical applications														
TEY106	EV106	W 36 T 31	1.60	170 140	2400 2000	420 390	5950 5600					20	2.2 3.75	0.36 0.28	157.0 128.0
Application	Furnace & metallurgical applications														
TEY110	EY110	W 45 T 42	1.75	290 210	4100 3000	480 470	6800 6700	150 140	2100 2000	120 56	1.7 0.8	14	1.33 3.04	1.00 0.5	419.0 209.0
Application	Chemical & metallurgical applications														
TEY300	EY300	48	1.72	400	5700	700	10000					19	4.5	0.3	105.0
Application	Continuous casting dies & thermal assembly Jigs														
TEY306	EY306	65	1.80	600	8500	1100	15600			116	1.6	14	4.9	0.18	75.0
Application	Continuous casting dies & thermal assembly Jigs														
TEY308	EY308	48	1.75	500	7140	1000	14280					13	3.5	0.25	105.0
Application	Continuous casting dies														
TEY9106	EY9106	50	1.72	300	4200	600	8500	180	2500	84	1.2	15	4.1	0.2	63.0
Application	Bearings & gland rings														



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METAL IMPREGNATED GRADES															
TMY3A	MY3A	70	2.50	580	8200	1900	27000	350	5000	309	4.4	2	5.0	0.04	17.0
Application	Bearings														
TMY3B	MY3B	70	2.60	590	8400	1900	27000	420	6000	260	3.7	2	4.2	0.04	17.0
Application	Sealing rings														
TMY3D	MY3D	70	2.60	685	9750	2140	30400	490	7000	300	4.3	2	5.4	0.06	25.0
Application	Bearings & sealing rings														
TMY3D(AERO)	MY3D(AERO)	75	2.80	1050	15000	2530	36000	600	8500	310	4.5	2	5.7	0.05	21.0
Application	Bearings, sealings & thrust rings in aircraft applications														
TMY3F	MY3F	70	2.40	560	8000	1970	28000	420	6000	240	3.5	2	4.7	0.045	19.0
Application	Wet running bearings														
TMY3K	MY3K	75	2.30	670	9500	2100	30000	440	6200	210	3.0	1	4.4	0.04	17.0
Application	Bearings & sealing rings														
TMY10A	MY10A	76	2.70	910	13000	2530	36000	520	7400	340	4.8	1	5.2	0.05	20.0
Application	Piston rod packing rings														
TMY10B	MY10B	75	2.60	845	12000	2460	35000	490	7000	260	3.7	1	5.0	0.035	15.0
Application	Bearings & sealing rings														
TMY10D	MY10D	75	2.90	980	14000	2600	37000	600	8500	300	4.4	1	5.0	0.04	17.0
Application	Bearings & sealing rings														
TMY10F	MY10F	73	2.70	980	14000	2670	38000	506	7200	260	3.7	1	5.0	0.04	17.0
Application	Bearings & sealing rings														
TMY10K	MY10K	80	2.50	910	13000	2810	40000	560	8000	340	4.8	2	4.7	0.03	13.0
Application	Sealing rings														
TMY10SK	MY10SK	80	2.40	840	12000	2810	40000	490	7000	340	4.8	1	4.5	0.03	13.0
Application	High duty sealing rings														
TMY104	MY104	72	2.60	630	9000	1690	24000	350	5000	200	2.8	2	4.0	0.036	15.0
Application	Pressed-to-shape sealing rings														
TMY106	MY106	75	2.30	630	9000	1760	25000	420	6000	280	4.0	2	4.9	0.04	17.0
Application	Pressed-to-shape sealing rings														
TMY9106GK	MY9106GK	65	2.30	560	8000	1690	24000	370	5300	140	2.0	2	5.0	0	69.0
Application	High temperature bearings & sealing rings														