

Main Mechanical & Physical Property of Sintered SmCo Magnet

Item	Unit	SmCo5	Sm2Co17	
Curie Temp.	°C	700-750	800-850	
Max. Working Temp.	°C	250	250-350	
Rever. Temp. Coeff. of Br	%/°C	-0.015 to -0.05	-0.01 to -0.03	
Rever. Temp. Coeff. of Hcj	%/°C	-0.12 to -0.30	-0.10 to -0.20	
Density	g/cm ³	8.1-8.3	8.3-8.5	
Vickers Hardness	Hv	500-650	550-00	
Coeff. of Thermal Expansion	⊥C	10 ⁻⁶ /°C	10-16	10-14
	//C	10 ⁻⁶ /°C	4-10	8-12
Specific Heat Capacity	J/(kg.°C)	300-500	300-500	
Thermal Conductivity	W/(m.°C)	5-15	5-15	
Specific Electric Resistance	10 ⁻⁶ Ω.m	0.40-0.70	0.65-0.95	
Elasticity Modulus	10 ⁵ N/mm ²	1.0-1.3	1.4-1.7	
Compressive Strength	N/mm ²	600-1100	400-900	
Flexural strength	N/mm ²	100-170	80-150	