

SmCo**Physical performance of SmCo**

Material	Grade	Remanence		Coercivity	Intrinsic Coercivity		Maximum Energy Product		Curie Temperature	Working Temperature	Remanence temperature coefficient	Intrinsic Coercivity Heat Resistance Coefficient
		Br		Hcb	Hcj		(BH)max		TC	TW		
		T	Gs	Koe	KA/m	Koe	KJ/m ³	Mgoe	℃	℃	%℃	%℃
SmCo 1:5	YX-16	0.81-0.85	8.1-8.5	7.8-8.3	1194-1830	15-23	110-127	14-16	750	250	-0.05	-0.3
	YX-18	0.85-0.9	8.5-9.0	8.3-8.8	1194-1830	15-23	127-143	16-18	750	250	-0.05	-0.3
	YX-20	0.9-0.94	9.0-9.4	8.5-9.1	1194-1830	15-23	150-167	19-21	750	250	-0.05	-0.3
	YX-22	0.92-0.96	9.2-9.6	8.9-9.4	1194-1830	15-23	160-175	20-22	750	250	-0.05	-0.3
	YX-24	0.96-1.0	9.6-10.0	9.2-9.7	1194-1830	15-23	175-190	22-24	750	250	-0.05	-0.3
SmCo 2:17	YXG-24H	0.95-1.02	9.5-10.2	8.7-9.4	1990	25	175-191	22-24	800	350	-0.03	-0.2
	YXG-26H	1.02-1.05	10.2-10.5	9.4-9.8	1990	25	191-207	24-26	800	350	-0.03	-0.2
	YXG-28H	1.03-1.08	10.3-10.8	9.5-10	1990	25	207-220	26-28	800	350	-0.03	-0.2
	YXG-30H	1.08-1.10	10.8-11.0	9.9-10.5	1990	25	220-240	28-30	800	350	-0.03	-0.2
	YXG-24H	0.95-1.02	9.5-10.2	8.7-9.4	1433	18	175-191	22-24	800	300	-0.03	-0.2
	YXG-26H	1.02-1.05	10.2-10.5	9.4-9.8	1433	18	191-207	24-26	800	300	-0.03	-0.2
	YXG-28H	1.03-1.08	10.3-10.8	9.5-10	1433	18	207-220	26-28	800	300	-0.03	-0.2
	YXG-30H	1.08-1.10	10.8-11.0	9.9-10.5	1433	18	220-240	28-30	800	300	-0.03	-0.2
	YXG-26M	1.02-1.05	10.2-10.5	9.4-9.8	955-1273	12-16	191-207	24-26	800	300	-0.03	-0.2

	YXG-2 8M	1.03-1 .08	10.3-1 0.8	9.5-10	955-12 74	12-1 6	207-2 20	26- 28	800	300	-0.03	-0.2
	YXG-3 0M	1.08-1 .10	10.8-1 1.0	9.9-10. 5	955-12 75	12-1 6	220-2 40	28- 30	800	300	-0.03	-0.2
	YXG-2 8L	1.02-1 .08	10.2-1 0.8	5.2-9.0	438-79 6	5.5- 10	207-2 20	26- 28	800	250	-0.03	-0.2
	YXG-3 0L	1.08-1 .15	10.8-1 1.5	5.2-9.0	438-79 6	5.5- 10	220-2 40	28- 30	800	250	-0.03	-0.2

Physical Performance of SmCo			
Parameter name	Unit	SmCo 1: 5	SmCo 2: 17
Density	g/cm ³	8.3	8.4
Curie Temperature	K	1000	1100
Vicker's hardness	Mpa	450-500	550-600
Compression hardness	Mpa	1000	800
Resistivity	Ω.cm	5~6*10 ⁻⁶	8~9*10 ⁻⁵
Bending Strength	Mpa	150-180	130-150
Tensile Strength	Mpa	400	350
Thermal expansion coefficient	(10 ⁻⁶ /°C)	// 6 ⊥ 12	// 8 ⊥ 11