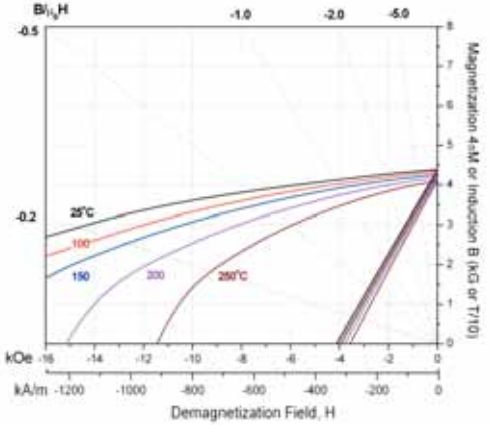


bonded magnets

RARE EARTH MAGNETS FOR DEMANDING APPLICATIONS

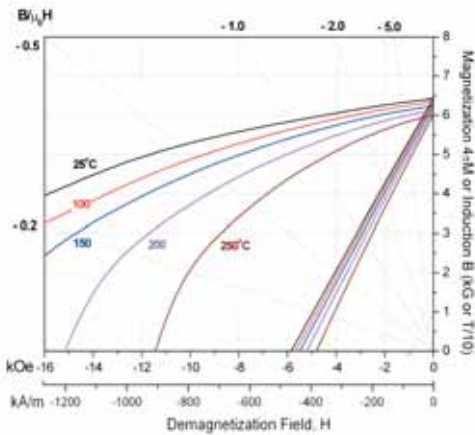


Bonded SmCo EEC - SCH5

$B_r = 4.3 - 5.0$ kG
 $H_c = 4.0 - 4.6$ kOe
 $H_{ci} > 20$ kOe
 $(BH)_{max} = 4.5 - 5.5$ MGOe
 Density: $6.5 - 7.1$ g/cm³
 Required Magnetizing Field: > 50 kOe
 Maximum Operating Temperature: 200°C
 α^* of B_r (25 - 100°C): $-0.03\%/^\circ\text{C}$
 β^* of H_{ci} (25 - 100°C): $-0.25\%/^\circ\text{C}$
 *Temperature Coefficient

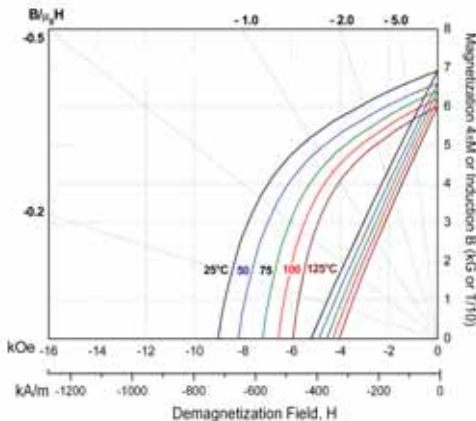
Bonded Magnet Grade	Residual Induction B_r		Coercive Force H_c		Intrinsic Coercive Force H_{ci}		Maximum Energy Product $(BH)_{max}$		T_m
	kG	T	kOe	kA/m	kOe	kA/m	MGOe	kJ/m ³	$^\circ\text{C}$
NdFeB									
NEOL10	6.8-7.4	0.68-0.74	5.1-5.4	406-430	8-10	637-796	9.5-10.5	76-84	120
NEOLS10	6.7-7.2	0.67-0.72	5.4-5.8	430-462	9-12	716-955	9.5-10.5	76-84	130
NEOH9	6.0-6.5	0.60-0.65	5.4-5.9	430-470	13-17	1034-1353	8.5-9.5	68-76	130
NEOHS9	6.0-6.4	0.60-0.64	5.3-5.8	422-462	14-18	1114-1433	8.5-9.5	68-76	130
NEOT9	6.1-6.6	0.61-0.66	5.0-5.6	398-446	11-14	876-1114	8.5-9.5	68-76	150
SmCo									
SCH5	4.3-5.0	0.43-0.50	4.0-4.6	318-366	>20	>1592	4.5-5.5	36-44	200
SCH10	6.1-6.8	0.61-0.68	5.5-6.2	438-494	>20	>1592	8.5-11.0	72-88	200

The chart above represents more commonly used materials. Additional customized magnet materials available upon request. Detailed second quadrant demagnetization curves and additional design data available at www.electronenergy.com



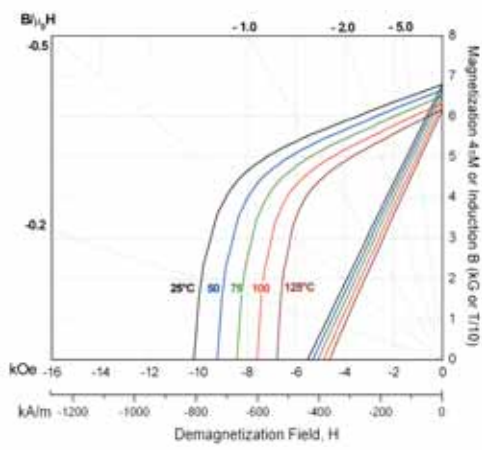
Bonded SmCo EEC - SCH10

$B_r = 6.1 - 6.8$ kG
 $H_c = 5.5 - 6.2$ kOe
 $H_{ci} > 20$ kOe
 $(BH)_{max} = 8.5 - 11.0$ MGOe
 Density: $6.5 - 7.1$ g/cm³
 Required Magnetizing Field: > 50 kOe
 Maximum Operating Temperature: 200°C
 α^* of B_r (25 - 100°C): $-0.03\%/^\circ\text{C}$
 β^* of H_{ci} (25 - 100°C): $-0.25\%/^\circ\text{C}$
 *Temperature Coefficient



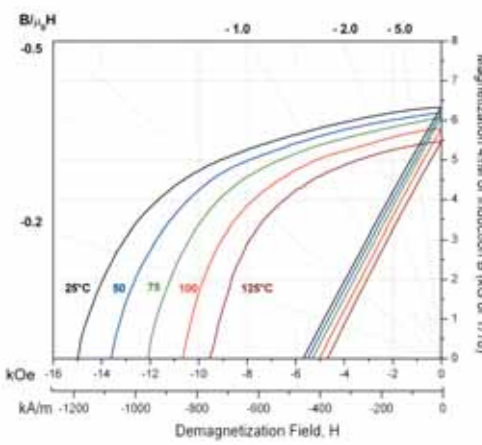
Bonded NdFeB EEC - NEOL10

$B_r = 6.8 - 7.4$ kG
 $H_c = 5.1 - 5.4$ kOe
 $H_{ci} = 8 - 10$ kOe
 $(BH)_{max} = 9.5 - 10.5$ MGOe
 Density: $5.8 - 6.1$ g/cm³
 Required Magnetizing Field: > 30 kOe
 Maximum Operating Temperature: 120°C
 α^* of B_r (25 - 100°C): $-0.11\%/^\circ\text{C}$
 β^* of H_{ci} (25 - 100°C): $-0.4\%/^\circ\text{C}$
 *Temperature Coefficient



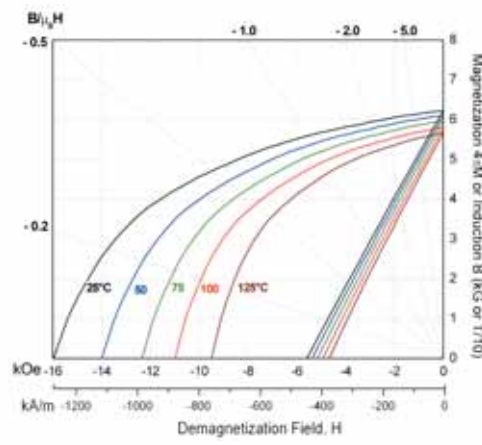
Bonded NdFeB EEC - NEOLS10

$B_r = 6.7 - 7.2$ kG
 $H_c = 5.4 - 5.8$ kOe
 $H_{ci} = 9 - 12$ kOe
 $(BH)_{max} = 9.5 - 10.5$ MGOe
 Density: $5.8 - 6.1$ g/cm³
 Required Magnetizing Field: > 30 kOe
 Maximum Operating Temperature: 130°C
 α^* of B_r (25 - 100°C): $-0.08\%/^\circ\text{C}$
 β^* of H_{ci} (25 - 100°C): $-0.39\%/^\circ\text{C}$
 *Temperature Coefficient



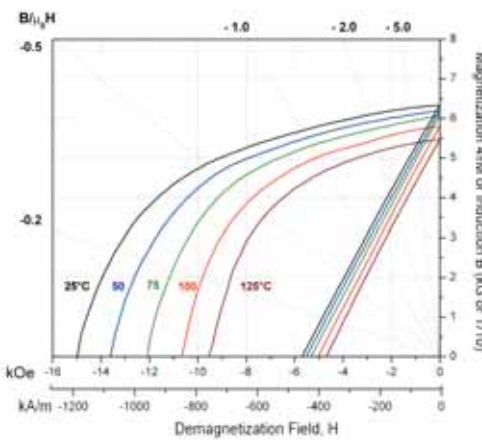
Bonded NdFeB EEC - NEOHS9

$B_r = 6.0 - 6.5$ kG
 $H_c = 5.4 - 5.9$ kOe
 $H_{ci} = 13 - 17$ kOe
 $(BH)_{max} = 8.5 - 9.5$ MGOe
 Density: $5.8 - 6.1$ g/cm³
 Required Magnetizing Field: > 30 kOe
 Maximum Operating Temperature: 130°C
 α^* of B_r (25 - 100°C): $-0.12\%/^\circ\text{C}$
 β^* of H_{ci} (25 - 100°C): $-0.38\%/^\circ\text{C}$
 *Temperature Coefficient



Bonded NdFeB EEC - NEOHS9

$B_r = 6.0 - 6.4$ kG
 $H_c = 5.3 - 5.8$ kOe
 $H_{ci} = 14 - 18$ kOe
 $(BH)_{max} = 8.5 - 9.5$ MGOe
 Density: $5.8 - 6.1$ g/cm³
 Required Magnetizing Field: > 30 kOe
 Maximum Operating Temperature: 130°C
 α^* of B_r (25 - 100°C): $-0.07\%/^\circ\text{C}$
 β^* of H_{ci} (25 - 100°C): $-0.42\%/^\circ\text{C}$
 *Temperature Coefficient



Bonded NdFeB EEC - NEOT9

$B_r = 6.1 - 6.6$ kG
 $H_c = 5.0 - 5.6$ kOe
 $H_{ci} = 11 - 14$ kOe
 $(BH)_{max} = 8.5 - 9.5$ MGOe
 Density: $5.8 - 6.1$ g/cm³
 Required Magnetizing Field: > 30 kOe
 Maximum Operating Temperature: 150°C
 α^* of B_r (25 - 100°C): $-0.13\%/^\circ\text{C}$
 β^* of H_{ci} (25 - 100°C): $-0.37\%/^\circ\text{C}$
 *Temperature Coefficient



Specialists in Rare Earth Magnets and Magnet Systems
 924 Links Avenue • Landisville, PA 17538
 717-898-2294 tel • 717-898-0660 fax

eec@electronenergy.com
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