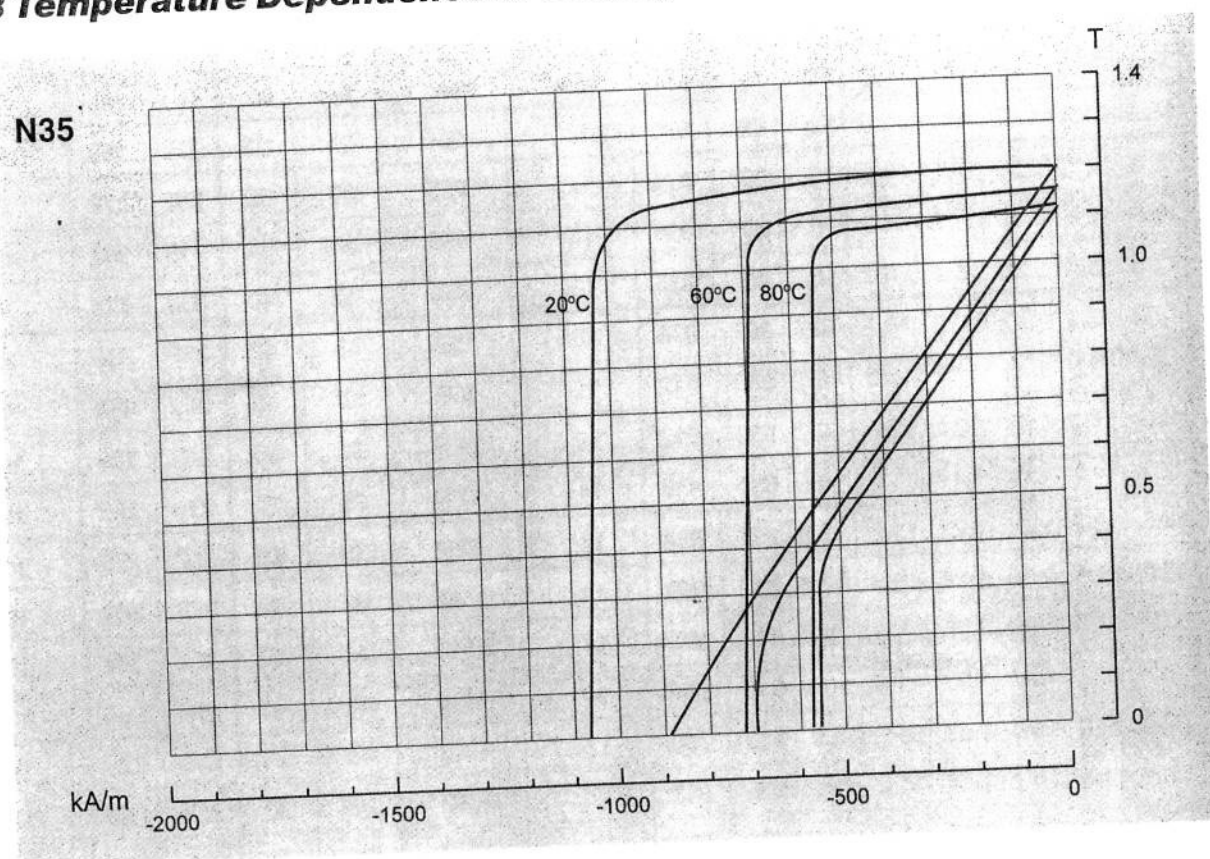


1.1-3 Temperature Dependence of Demagnetization Curves



1.1-2 Characteristic magnetic properties at room temperature (20°C)

Material Code	Remanence Br				Coercivity Hcb				Intrinsic Coercivity Hcj		Max. Energy Product				Max. Working Temp.
	kGs		T		kOe		kA/m		kOe	kA/m	MGOe		kJ/m³		°C (L/D=0.7)
	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Min	Min	Min	Typ.	Min	Typ.	Min	
N35	12.2	11.7	1.22	1.17	11.2	10.5	891	836	12	955	35	33	279	263	80

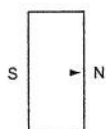
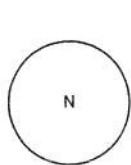
1.1-4 Physical properties at room temperature (20°C)

Temp. Coeff. of Br:	-0.11%/°C (20-100°C)	Temp. Coeff. of iHc:	-0.60%/°C (20-100°C)
Density:	7.4-7.6g/cm ³	Electrical resistivity:	144 $\mu \Omega \cdot \text{cm}$
Vickers Hardness:	570Hv	Flexural Strength:	25kg/mm
Tensile strength:	8.0kg/mm ²	Coeff. of Thermal Expansion:	4 x 10 ⁻⁶ /°C
Specific Heat:	0.12kCal/(kg.°C)	Thermal Conductivity:	7.7kcal/(m.h.°C)
Young's Modulus:	1.6 x 10 ¹¹ N/m ²	Rigidity:	0.64N/m ²
Poisson's Ratio:	0.24	Compressibility:	9.8 x 10 ⁻¹² m ² /N
Curie Temperature:	310-340°C		

1.1-5 Surface Protection and coatings

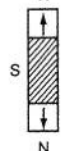
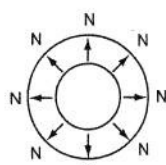
Surface	Type	Minimal layer thickness	Surface color	Remarks
Passivation		$\leq 1 \mu$	Silver grey	Temporary Protection
Nickel coating	Ni+Ni	10-20 μ	Silver semibright	Excellent resistance to humid atmosphere
	Ni+Cu+Ni			Superior resistance to humid atmosphere
Zinc coating	Zn	8-20 μ	Blue whiteshining	Good resistance to salt spray
	C-Zn		Colour shining	Excellent resistance to salt spray
Tin coating	Ni+Cu+Sn	15-20 μ	Silver semibright	Superior resistance to humid atmosphere
Gold coating	Ni+Cu+Au	10-20 μ	Gold shining	Superior resistance to humid atmosphere
Copper coating	Ni+Cu	10-20 μ	Gold shining	Temporary treatment
Epoxy	Ni+Cu+Epoxy	15-25 μ	Black	Excellent climatic and salt spray resistance
	Zn+Epoxy			
Chemical Coating	Ni	10-20 μ	Silver semibright	Excellent resistance to humid atmosphere

1.1-6 Types of Magnetization

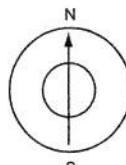


axial

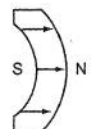
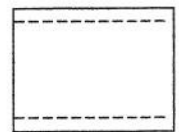
(also multi-poles)



radial



diametral



diametral