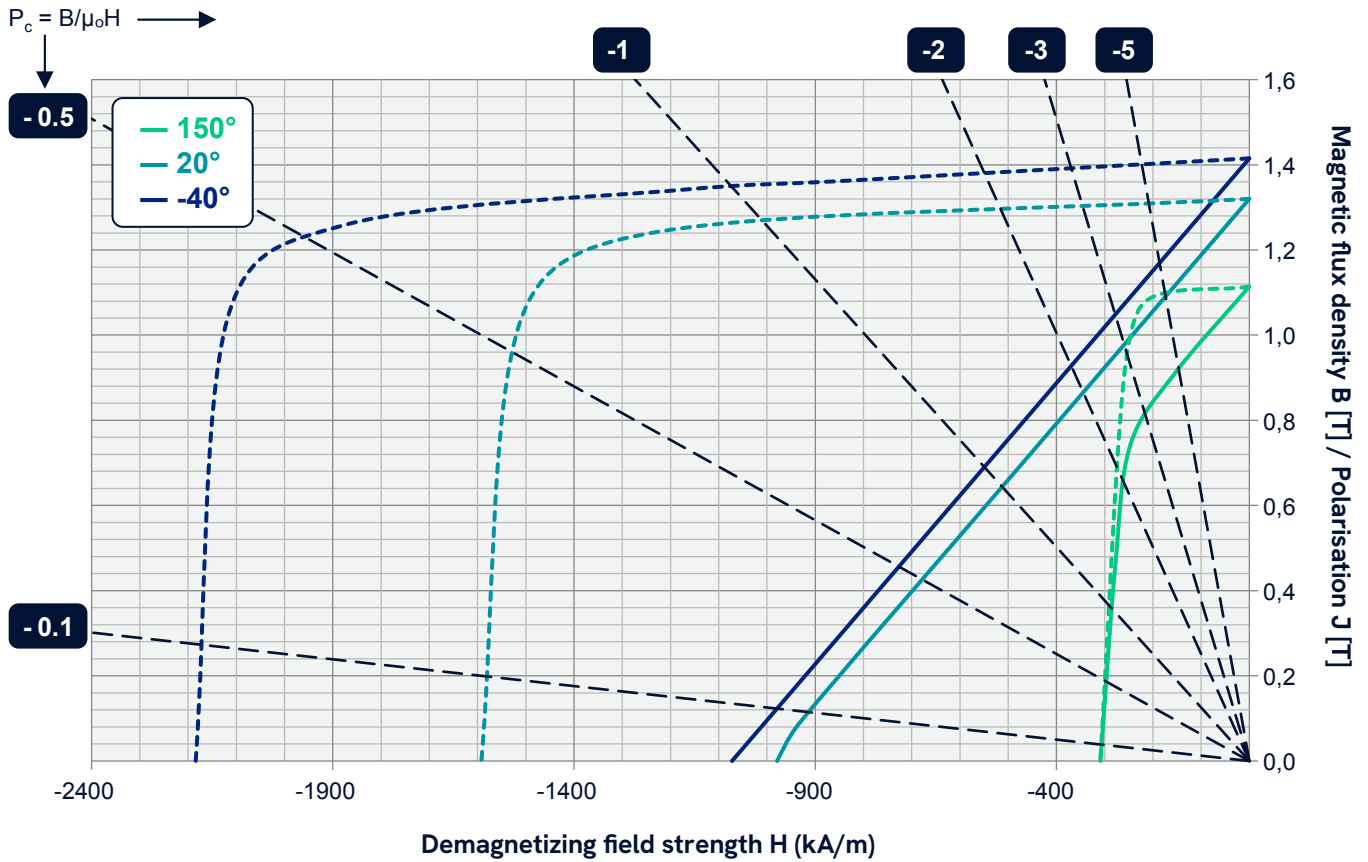


Demagnetization curve N45SH



Solid lines represent magnetic flux densities. Dashed lines represent polarisations. The curves here are estimates obtained from data available from the current Goudsmit grade system (Available on the website. See also the magnetic properties below). On request, actual measurements of demagnetization curves can be obtained. For that, contact us on the address below.

Magnetic properties @20°C			
B_r	min	1.32	T
H_{cB}	min	979	kA/m
H_{cJ}	min	1592	kA/m
$(BH)_{max}$	min	333	kJ/m ³
$\alpha(B_r)$	min typ	-0.12	%/°C
$\beta(H_{cJ})$	min typ	-0.62	%/°C
T_{max}		150	°C
μ_r	typ	1.05	-

Physical & Mechanical properties @20°C		
Density	typ	7400 - 7800 kg/m ³
Vickers Hardness	typ	500 - 700 HV
Modulus of Elasticity / Young's modulus	typ	140 - 200 GPa
Flexural / bending strength	typ	100 - 400 MPa
Compressive strength	typ	600 - 1100 MPa
Tensile strength / ultimate strength	typ	74 - 90 MPa
Electrical resistivity	typ	1.1 - 1.7 $\mu\Omega\text{m}$
Specific heat capacity	typ	350 - 550 J/(kg K)
Thermal conductivity	typ	5 - 15 W/(m K)
Coefficient of linear thermal expansion, DOM*	typ	3 - 9 $10^{-6}/\text{K}$
Coefficient of linear thermal expansion, \perp DOM*	typ	-3 - 0 $10^{-6}/\text{K}$

*DOM = Direction Of Magnetization