

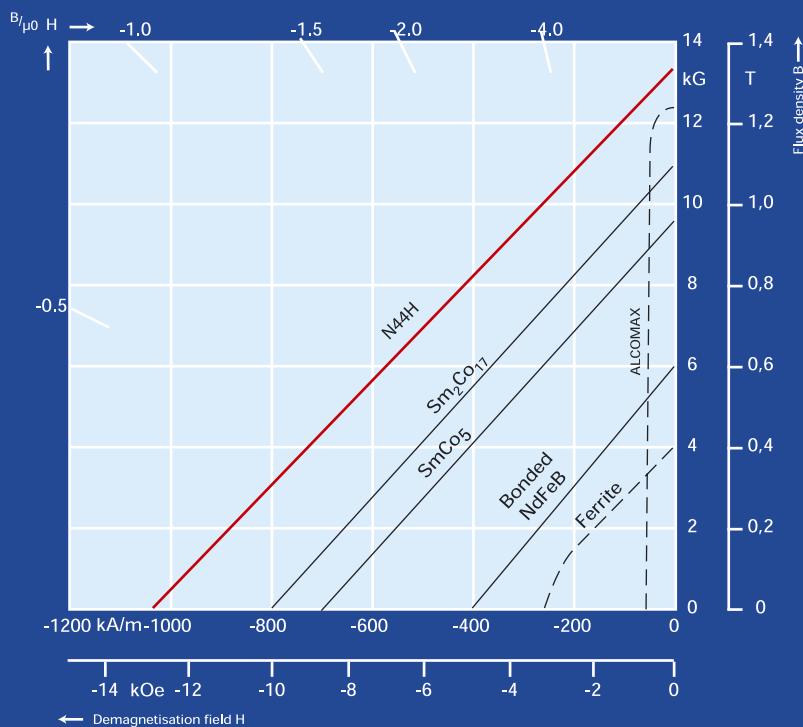
Neodymium-Iron-Boron

Due to over 20 years of continuous development the Neodymium Iron Boron Family has evolved over 30 grades based on the maximum energy product and operating temperature. Some grades have become obsolete as laboratory curios become factory product. Some factories are now claiming operating temperatures as low as 50°C and up to 230°C for specialist use. MagDev source from several factories and a summary of the range of grades is shown below. Please note that not all sizes are available in all grades. It is wise to seek assistance during the concept stage of product design to establish what we can offer.

Typical Magnet and Physical Specifications

Grade Type	Br kG min/typ	bHc kOe min/typ	jHc kOe Oersted	BHMax min/typ	Max Temp °C	Comments
N35	11.7/12.1	10.8/11.4	>12	33/35	80	A basic, low cost magnet offering good strength at room temp
N30H	10.8/11.2	10.1/10.6	>17	28/30	120	A basic grade useful to 120°C but at the expense of some energy
N33H	11.4/11.7	10.3/11.0	>17	31/33	120	Slightly higher energy than N30H
N35H	11.7/12.1	10.8/11.4	>17	33/35	120	Good strength to 120°C becoming our standard grade
N44H	12.9/13.5	12.3/13.1	>16	40/44	120	Our top energy grade used for cutting small orders and special sizes
N27SH	10.2/10.6	9.8/10.3	>20	25/27	150	Higher temp use at the expense of more energy
N30UH	11.0/11.6	10.3/11.1	>27	28/32	180	Highest temp grade block for cutting

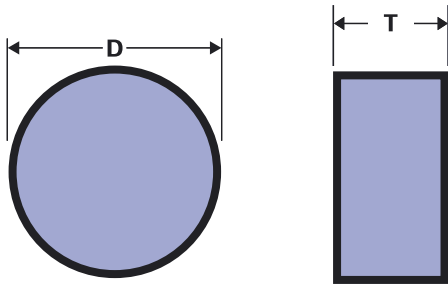
Density g/cc	7,5	Young's Modulus	kN/mm ²	150
Curie Temp. °C	310	Bending Strength	N/mm ²	250
Spec. Res ~Ω mm ² /m	1,5	Compressive Strength	N/mm ²	1000
Hardness (Vickers)	580	Thermal Conductivity	W/m°C	9



Typical demagnetisation curves of Neodymium-Iron-Boron at room temperature

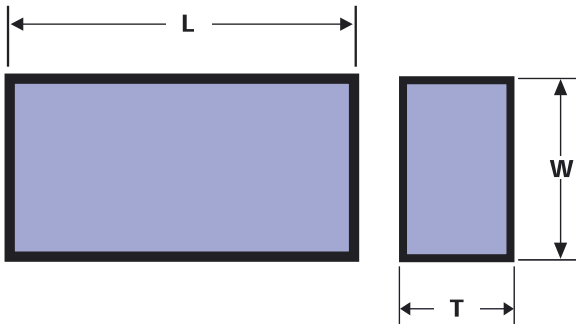
Neodymium - Iron - Boron

Discs



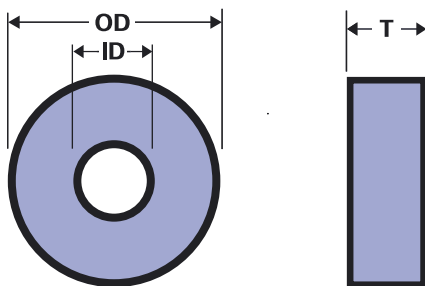
PART NUMBER	SIZE (mm)		Coating	Grade
	D	T		
DCNI 00959/N	3	1	Nickel	N30H
DCNI 00962/N	3	2	Nickel	N30H
DCNI 02396/N	4	1	Nickel	N30H
DCNI 02988/N	4	1.5	Nickel	N30H
DCNI 01618/N	4	3	Nickel	N30H
DCNI 02657/N	4	5	Nickel	N27SH
DCNI 00734/N	5	3	Nickel	N35H
DCNI 03783/N	6	1	Nickel	N33H
DCNI 00886/N	6	2	Nickel	N35H
DCNI 04160/N	6	5	Nickel	N35H
DCNI 03221/N	6	6	Nickel	N35H
DCNI 00678/N	9	5	Nickel	N35H
DCNI 00675/N	10	3	Nickel	N35H
DCNI 03446/N	10	4	Nickel	N33H
DCNI 00626/N	10	5	Nickel	N33H
DCNI 02850/N	15	1.5	Nickel	N35H
DCNI 00677/N	15	3	Nickel	N35H
DCNI 00627/N	20	5	Nickel	N33H
DCNI 03950/N	22	2	Nickel	N35
DCNI 03756/N	24	20	Nickel	N38
DCNI 03949/N	25	3.5	Nickel	N35
DCNI 03140/N	33	10	Nickel	N27SH

Bars & Blocks



PART NUMBER	SIZE (mm)			Coating	Grade
	L	W	T		
BLNI 00617/P	3	3	1	Parylene	N33H
BLNI 01113/T	3	3	1	Tin	N30SH
BLNI 00618/P	5	5	3	Parylene	N33H
BLNI 00659	6	4	1.5	uncoated	N33H
BLNI 03688/N	7.5	5.8	1.7	Nickel	N35
BLNI 03510/N	9.2	9.2	5.55	Nickel	N33SH
BLNI 00619/N	10	10	3	Nickel	N35H
BLNI 03511/N	20	9.2	5.55	Nickel	N33H
BLNI 01054/N	30	10	5	Nickel	N35H
BLNI 02648/N	40	10	5	Nickel	N33SH
BLNI 03763	50	50	12.5	uncoated	N35
BLNI 00893	63	36	6	uncoated	N35H
BLNI 00700	63	36	10	uncoated	N35H

Rings



PART NUMBER	SIZE(mm)			Coating	Grade
	OD	ID	T		
RGNI 01090/N	8	4.3	4	Nickel	N33H
RGNI 00630/N	9.5	3.2	1.6	Nickel	N35H
RGNI 01094/N	12	6.5	2.5	Nickel	N33H
RGNI 01093	20	10	5	uncoated	N33H
RGNI 02069	20	12	3	uncoated	N33H
RGNI 02244/N	35.4	25	8.5	Nickel	N35
RGNI 01142	41	35	9	uncoated	N35H
RGNI 01143	48	42	9	uncoated	N35H
RGNI 03849/N	76	42	6	Nickel	N35
RGNI 04136/N	101	60	6	Nickel	N35H