

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/m ³		°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
N38	12.6	12.2	1.26	1.22	11.2	10.5	891	836	12	955	38	35	302	279	80
N40	13.0	12.6	1.30	1.26	11.2	10.5	891	836	12	955	40	38	318	302	80
N42	13.3	13.0	1.33	1.30	11.2	10.5	891	836	12	955	42	40	334	318	80
N45	13.7	13.3	1.37	1.33	11.2	10.5	891	836	12	955	45	42	358	334	80
N48	14.1	13.7	1.41	1.37	10.8	10.2	859	812	11	875	48	45	382	358	80
N33M	11.7	11.4	1.17	1.14	10.8	10.2	859	812	14	1114	33	30	263	239	100
N35M	12.2	11.7	1.22	1.17	11.2	10.5	891	836	14	1114	35	33	279	263	100
N38M	12.6	12.2	1.26	1.22	11.5	10.8	915	859	14	1114	38	35	302	279	100
N40M	13.0	12.6	1.30	1.26	11.5	10.8	915	859	14	1114	40	38	318	302	100
N42M	13.3	13.0	1.33	1.30	11.5	10.8	915	859	14	1114	42	40	334	318	100
N45M	13.7	13.3	1.37	1.33	11.5	10.8	915	859	14	1114	45	42	358	334	100
N30H	11.4	10.8	1.14	1.08	10.2	9.8	812	780	17	1353	30	28	239	223	120
N33H	11.7	11.4	1.17	1.14	11.0	10.2	875	812	17	1353	33	30	263	239	120
N35H	12.2	11.7	1.22	1.17	11.2	10.5	891	836	17	1353	35	33	279	263	120
N38H	12.6	12.2	1.26	1.22	11.5	10.8	915	859	17	1353	38	35	302	279	120
N40H	13.0	12.6	1.30	1.26	11.5	10.8	915	859	17	1353	40	38	318	302	120
N42H	13.3	13.0	1.33	1.30	11.5	10.8	915	859	17	1353	42	40	334	318	120
N44H	13.6	13.3	1.36	1.33	11.5	10.8	915	859	17	1353	44	42	350	334	120
N30SH	11.4	10.8	1.14	1.08	10.2	9.8	812	780	20	1592	30	28	239	223	150
N33SH	11.7	11.4	1.17	1.14	11.0	10.2	875	812	20	1592	33	30	263	239	150
N35SH	12.2	11.7	1.22	1.17	11.2	10.5	891	836	20	1592	35	33	279	263	150
N38SH	12.6	12.2	1.26	1.22	11.5	10.8	915	859	20	1592	38	35	302	279	150
N40SH	13.0	12.6	1.30	1.26	11.5	10.8	915	859	20	1592	40	38	318	302	150
N42SH	13.3	13.0	1.33	1.3	11.5	10.8	915	859	20	1592	42	40	334	318	150
N28UH	10.8	10.4	1.08	1.04	10.2	9.8	812	780	25	1989	28	25	223	199	160
N30UH	11.4	10.8	1.14	1.08	10.6	10.0	844	796	25	1989	30	28	239	223	160
N33UH	11.7	11.4	1.17	1.14	11.0	10.2	875	812	25	1989	33	30	263	239	160
N35UH	12.2	11.7	1.22	1.17	11.2	10.5	891	836	25	1989	35	33	279	263	160
N28EH	10.8	10.4	1.08	1.04	10.2	9.8	812	780	30	2387	28	25	223	199	180
N30EH	11.4	10.8	1.14	1.08	10.6	10.0	844	796	30	2387	30	28	239	223	180
N33EH	11.7	11.4	1.17	1.14	11.0	10.2	875	812	30	2387	33	30	263	239	180

Remark: The max working temperature is only for reference, is depended on the circuit the magnet is operating in. Customers are recommended to consult us on application involving temperature near to 150°C.

Sample No.	Length millimeters	Width millimeters	Thickness millimeters	outer diameter millimeters	inner diameter millimeters				
1			5.99	12.99	4.20				
2			6.01	13.00	4.21				
3			5.99	12.98	4.19				
4			6.00	12.98	4.19				
5			6.00	12.99	4.19				
6			6.01	13.01	4.24				
7	/	/	6.00	12.99	4.19	/	/	/	
8	/	/	5.98	12.98	4.19	/	/	/	
9	/	/	6.01	13.00	4.21	/	/	/	
10			6.04	13.03	4.24				
11			5.96	12.95	4.18				
12			5.99	12.96	4.18				
13			6.01	13.01	4.24				
14			6.01	13.02	4.20				
15			6.01	13.01	4.21				

II/C=0

Nr. No.	Charakteristik Characteristics	Toleranz Tolerances	Zeitpunkt der Kontrolle Phase	Prüfbedingungen Frequency	Auswahlverfahren Modality	Prüfverfahren Method	Dokumentation Recording	Reaktion bei Fehler Reaction if out of control
1	OUT. DIA 13	+0.1 -0.1	P.F.S	II C=0	System- atically	Calipers	Paper/ date	Reject
2	INS. DIA 4.2	+0.1 -0.1	P.F.S	II C=0	System- atically	Calipers	Paper/ date	Reject
3	THICKNESS 6	+0.05 -0.05	P.F.S	II C=0	System- atically	Calipers	Paper/ date	Reject
4	⊥ 90±1°		P.F.	II C=0	System- atically	Micro- meter	Paper/ date	Reject
5	// 0.05		P.F.	II C=0	System- atically	Micro- meter	Paper/ date	Reject
6	⊙ 0.15		P.F.	II C=0	System- atically	Micro- meter	Paper/ date	Reject
7	Appearance	Visual	P.F.	100%	System- atically	Visual	Paper/ date	Reject
8	Br(mT)	1219~ 1208	I.P.F.	Sampling	Randomly		Curve	Reject
9	iHc(KA/m)	1027~ 1005	I.P.F.	Sampling	Randomly	Perma- graph		Reject
10	(BH)max (KJ/m³)	285~ 279	I.P.F.	Sampling	Randomly			Reject
11	Gauss(Gs)	/	I.P.F.	/	System- atically	Gauss- meter	Paper/ date	Reject

I = RAW MATERIAL INCOMING CONTROL
F = FINAL PRODUCTION CONTROL

P = PROCESS CONTROL
S = STATISTICAL CONTROL

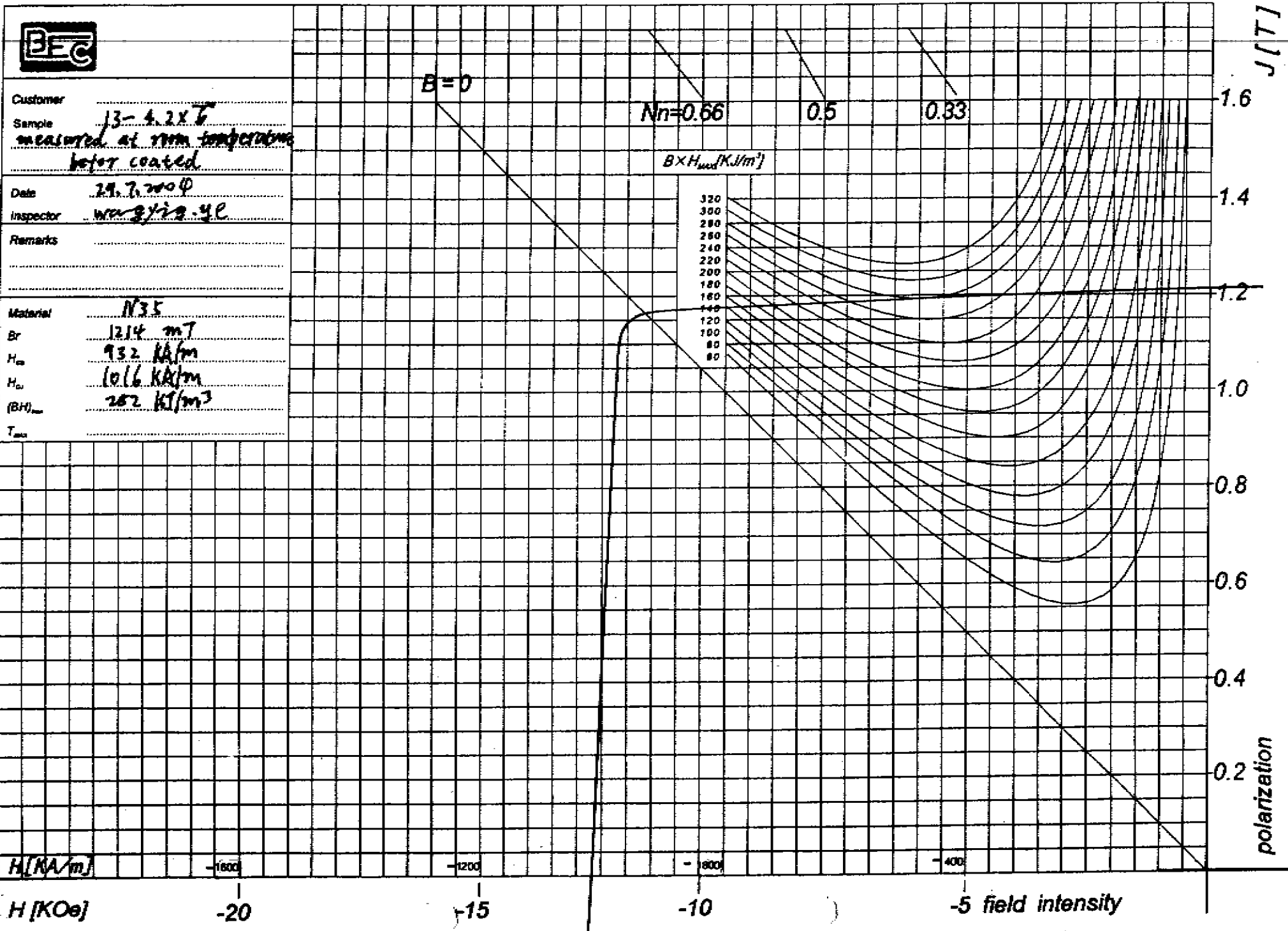


Customer
Sample 13-4.2X6
measured at room temperature
before coated

Date 29.7.2004
Inspector w.r.g./r.g.

Remarks

Material N35
Br 1214 mT
H₁₀ 932 kA/m
H₅₀ 1016 kA/m
(BH)_{max} 282 kJ/m³
T_{max}



H [kA/m]

-1600

-1200

-800

-400

H [kOe]

-20

-15

-10

-5 field intensity

J [T]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
polarization