

ANISOTROPIC FERRITE POWDER FOR BONDED MAGNETS

20/Sep/13
DOWA F-TEC Co., LTD.

1. MECHANICAL ORIENTATION POWDER (Sr-Ferrite)

1-1. Powder and Magnetic Properties

1-2. APPLICATION : A Case of Calender Molding

(Binder : NBR, Ferrite Content : 90mass%)

※ D : Density

Descriptions	Powder's Properties		Magnetic Properties - Compress Method			Magnetic Properties - Calender Roll Molded					Merit : ◎>○>△				
	Average Particle Diameter (APD)	Compressed Density (CD)	Residual Induction (Br)	Coercive Force (HcB)	Intrinsic Coercive Force (HcJ)	Density of Pressing (Dp)	Residual Induction (Br)	Coercive Force (HcB)	Intrinsic Coercive Force (HcJ)	Maximum Energy Product ((BH)max)					
Unit	SI										Viscosity	Br	Hc	※ D ↑ (C ↑)	
Products	cgsgs	μm	g/cm ³	mT (G)	kA/m (Oe)	kA/m (Oe)	g/cm ³	mT (G)	kA/m (Oe)	kA/m (Oe)					kJ/m ³ (MGOe)
OP-56	—	1.05±0.15	3.10±0.1	190±7 (1900±70)	130±8 (1630±100)	250±16 (3200±200)	3.54	249 (2490)	181 (2280)	264 (3320)	11.7 (1.47)	○	◎	◎	○
NF-56	—	1.05±0.15	3.20±0.1	190±7 (1900±70)	131±8 (1650±100)	259±16 (3250±200)	3.55	241 (2410)	177 (2220)	267 (3360)	11.0 (1.38)	◎	○	◎	◎

2. MAGNETIC ORIENTATION POWDER (Sr-Ferrite)

2-1. Powder and Magnetic Properties

2-2. APPLICATION : A Case of Injection Molding

(Binder : PA6, Ferrite Content : 90mass%)

※ D : Density

C : Content

Descriptions	Powder's Properties		Magnetic Properties - Compress Method			Melt Flow Rata (MFR)	Magnetic Properties - Injection Molded					Merit : ◎>○>△				
	Average Particle Diameter (APD)	Compressed Density (CD)	Residual Induction (Br)	Coercive Force (HcB)	Intrinsic Coercive Force (HcJ)		Density of Pressing (Dp)	Residual Induction (Br)	Coercive Force (HcB)	Intrinsic Coercive Force (HcJ)	Maximum Energy Product ((BH)max)					
Unit	SI										MFR	Br	Hc	※ D ↑ (C ↑)		
Products	cgsgs	μm	g/cm ³	mT (G)	kA/m (Oe)	kA/m (Oe)	g/10min	g/cm ³	mT (G)	kA/m (Oe)					kA/m (Oe)	kJ/m ³ (MGOe)
OP-71	—	1.25±0.15	3.35±0.1	195±7 (1950±70)	123±4 (1550±50)	203±12 (2550±150)	50	3.75	293 (2930)	196 (2460)	224 (2810)	16.7 (2.10)	△	△	○	△
NF-350	—	1.40±0.15	3.40±0.1	196±7 (1960±70)	123±4 (1550±50)	195±12 (2450±150)	100	3.75	298 (2980)	188 (2360)	208 (2610)	17.4 (2.19)	○	○	○	○
SF-500	—	1.40±0.15	3.40±0.1	196±7 (1960±70)	123±4 (1550±50)	195±12 (2450±150)	80	3.75	298 (2980)	188 (2360)	208 (2610)	17.4 (2.19)	○	○	○	○
SF-600	—	1.45±0.15	3.45±0.1	196±7 (1960±70)	123±4 (1550±50)	195±12 (2450±150)	120	3.75	299 (2990)	183 (2300)	203 (2550)	17.4 (2.19)	◎	○	○	◎
SF-200	—	1.70±0.15	3.42±0.1	197±7 (1970±70)	121±4 (1520±50)	175±12 (2200±150)	90	3.75	300 (3000)	178 (2230)	195 (2450)	17.6 (2.21)	○	◎	△	○
SF-B320	—	1.55±0.15	3.47±0.1	197±7 (1970±70)	121±4 (1530±50)	183±14 (2300±180)	90	3.75	300 (3000)	175 (2200)	191 (2400)	17.5 (2.20)	○	◎	△	◎
SF-D360	—	1.30±0.15	3.55±0.1	196±7 (1960±70)	119±4 (1520±50)	183±14 (2300±180)	100	3.75	300 (3000)	185 (2320)	215 (2700)	17.5 (2.20)	◎	◎	○	◎
SF-D630	—	1.55±0.15	3.58±0.1	199±7 (1990±70)	121±4 (1530±50)	175±14 (2200±180)	140	3.75	300 (3000)	173 (2170)	193 (2430)	17.5 (2.20)	◎	◎	△	◎
SF-H470	—	1.20±0.15	3.50±0.1	200±7 (2000±70)	127±4 (1600±50)	223±14 (2700±180)	100	3.75	298 (2980)	205 (2580)	255 (3200)	17.3 (2.18)	◎	○	◎	◎