FeSi Powder

Chemical composition（wt%）

Grade	Si	C	S	P	O	Fe
Fe-6.5%Si	6.2~6.8	≤0.03	≤0.02	≤0.04	≤0.1	Balance
Fe-5.5%Si	5.2~5.8	≤0.03	≤0.02	≤0.04	≤0.1	Balance

Physical property

Grade	Particle size distribution					Apparent density g/cm3	Tap density g/cm3
	+200mesh	-200mesh	D10(μm)	D50(μm)	D90(μm)		
Fe-6.5%Si	≤3%	≥97%	10.0~15.0	30.0~42.0	≤75.0	≥3.2	≥4.5
Fe-5.5%Si	≤3%	≥97%	10.0~15.0	30.0~42.0	≤75.0	≥3.3	≥4.6

Electromagnetic properties

Grade	Effective magnetic Conductivity (μemax)	Core loss （mW/cm3）(μe=60,50kHz,100mT)	DC bias % μ/μiμe=60,H=100Oe
Fe-6.5%Si	110	≤600	≥76%
Fe-5.5%Si	100	≤600	≥76%

FeSiAl Powder

Chemical composition（wt%）

Grade	Al	Si	C	S	P	O	Fe
FeSiAl	5.3~5.8	9.2~9.6	≤0.03	≤0.01	≤0.02	≤0.06	Balance

Physical property

Grade	Particle size distribution		Laser particle size distribution			Apparent density g/cm3	Tap density g/cm3
	+200mesh	-200mesh	D10(μm)	D50(μm)	D90(μm)		
FeSiAl	≤3%	≥97%	10.0~18.0	35.0~50.0	≤85.0	≥3.5	≥4.8

Electromagnetic properties

Grade	Effective magnetic Conductivity (μemax)	core loss (mW/cm3)		DC bias % μ/μiμe=60,H=100 Oe
		μe=60,50kHz,100mT	100kHz,100mT	
FeSiAl	125	≤180	≤500	60%

FeNi Powder

Chemical composition（wt%）

Grade	Ni	C	S	P	O	Fe
Fe50Ni50	49~51	≤0.02	≤0.01	≤0.02	≤0.06	Balance

Physical property

Grade	Particle size distribution		Laser particle size distribution			Apparent density g/cm3	Tap density g/cm3
	+200mesh	-200mesh	D10(μm)	D50(μm)	D90(μm)		
Fe50Ni50	≤3.5%	≥96.5%	7.0~15.0	18.0~38.0	≤70.0	≥3.7	≥5.2

Electromagnetic properties

Grade	Effective magnetic Conductivity (μemax)	core loss （mW/cm3） (μe=60,50kHz,100mT)	DC bias% μ/μiμe=60,H=100Oe
Fe50Ni50	160	≤300	≥76%