

CSC Fine Flux Cores

Soft Magnetic Core div.

2016 May

1-1. Material Introduction

◆ Material Comparison Table

★ → ◎ → ○ → △

Materials	CSC New Materials				CSC Traditional Materials			
	HS	KS	KH	Fine Flux	High Flux	Mega Flux®	Sendust	MPP
Main Application	UPS Server Power Automotives	Solar UPS	UPS Server Power	UPS Home appliances Automotives	Server Power Automotives	Solar UPS Automotives	PC Power Solar	Military Aerospace Medical
Perm. (μ_i)	19-90	26-40	26-90	19-60	26-160	19-90	26-125	26-200
Bs (kG)	14	14	15	12	15	16	10	7
Curie Temp [°C]	500	500	600	500	500	700	500	450
Core Loss	★	○	○	◎	★	△	◎	★
DC Bias	◎	◎	★	◎	★	★	△	○
Temp. Stability	◎	○	◎	○	★	◎	△	★
Relative Cost	○	◎	○	★	○	◎	★	△

1-2. Material Introduction

(1) General Information

Composition	Fe-Si-Al
Available Permeability(μ)	19, 26, 40, 60
Coating Color	Dark Blue
B max(Gauss)	12,000
Curie Temp[$^{\circ}$ C]	500
Available Shape	Toroidal, Block(19, 26 μ), Cylinder
CF270060→	CSC Fine Flux OD=27mm Perm=60 μ

(2) Feature

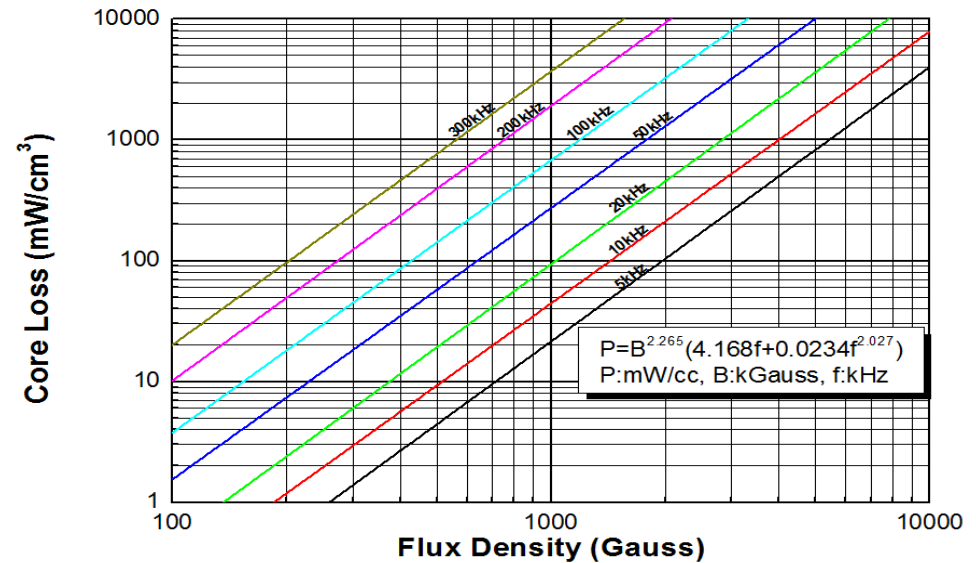
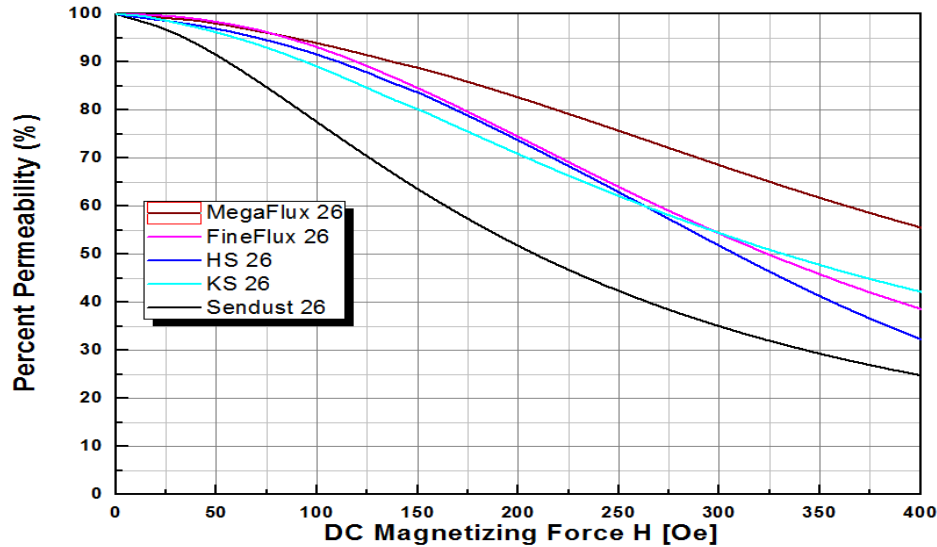
Advantage	Disadvantage
High DCB ← Good Saturation	Lower DCB than MegaFlux
Low Core Losses like Sendust	
Moderate Cost → Nickel is not included	
Good Temp. Stability	

2-1. Fine Flux 26 μ

(1) Material Comparison

Material	26 μ DCB%			26 μ Core Loss	
	@200 Oe	@300 Oe	@400 Oe	@20kHz, 1000G	@50kHz, 1,000G
Fine Flux	74%	54%	38%	93	273
Mega Flux	82%	68%	56%	223	661
HS	74%	51%	33%	49	136
KS	71%	55%	42%	190	564
Sendust	53%	35%	25%	93	264

(2) Graph

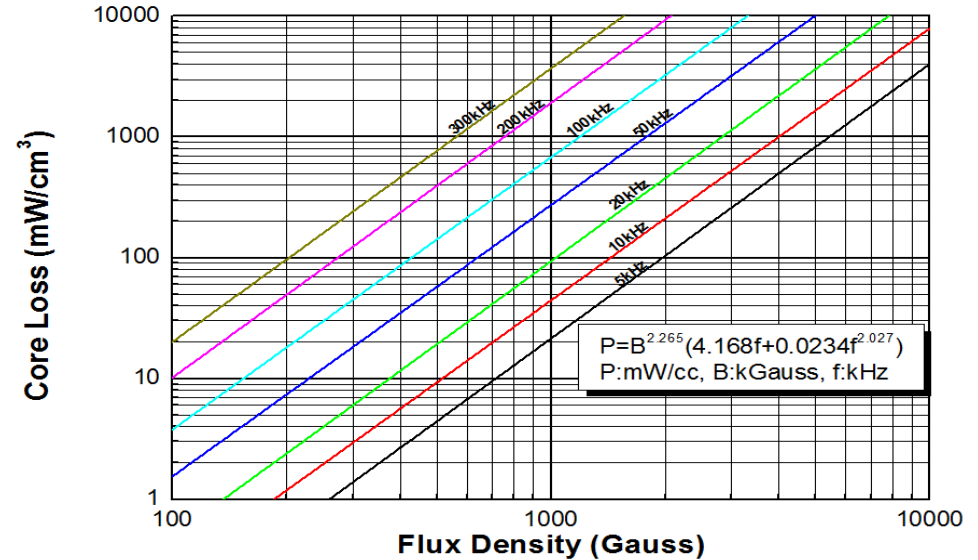
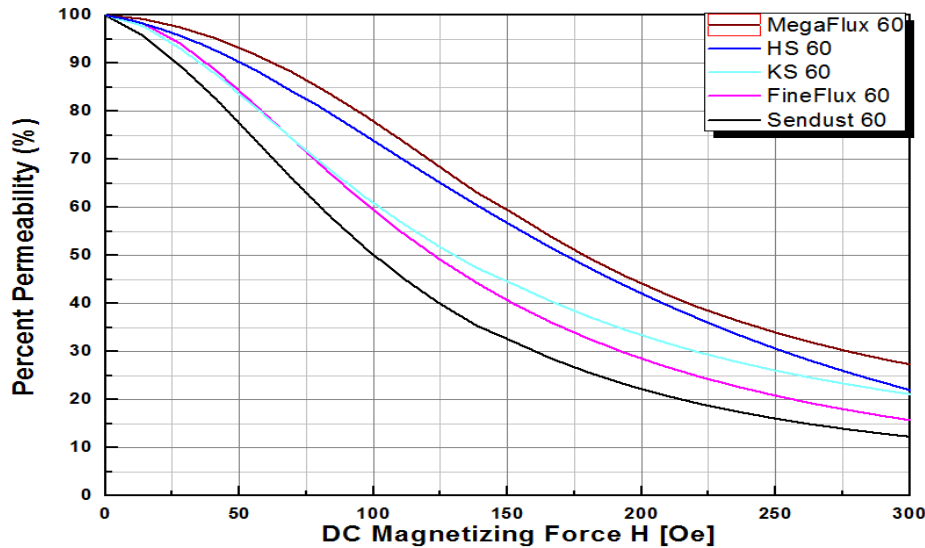


2-2. Fine Flux 60 μ

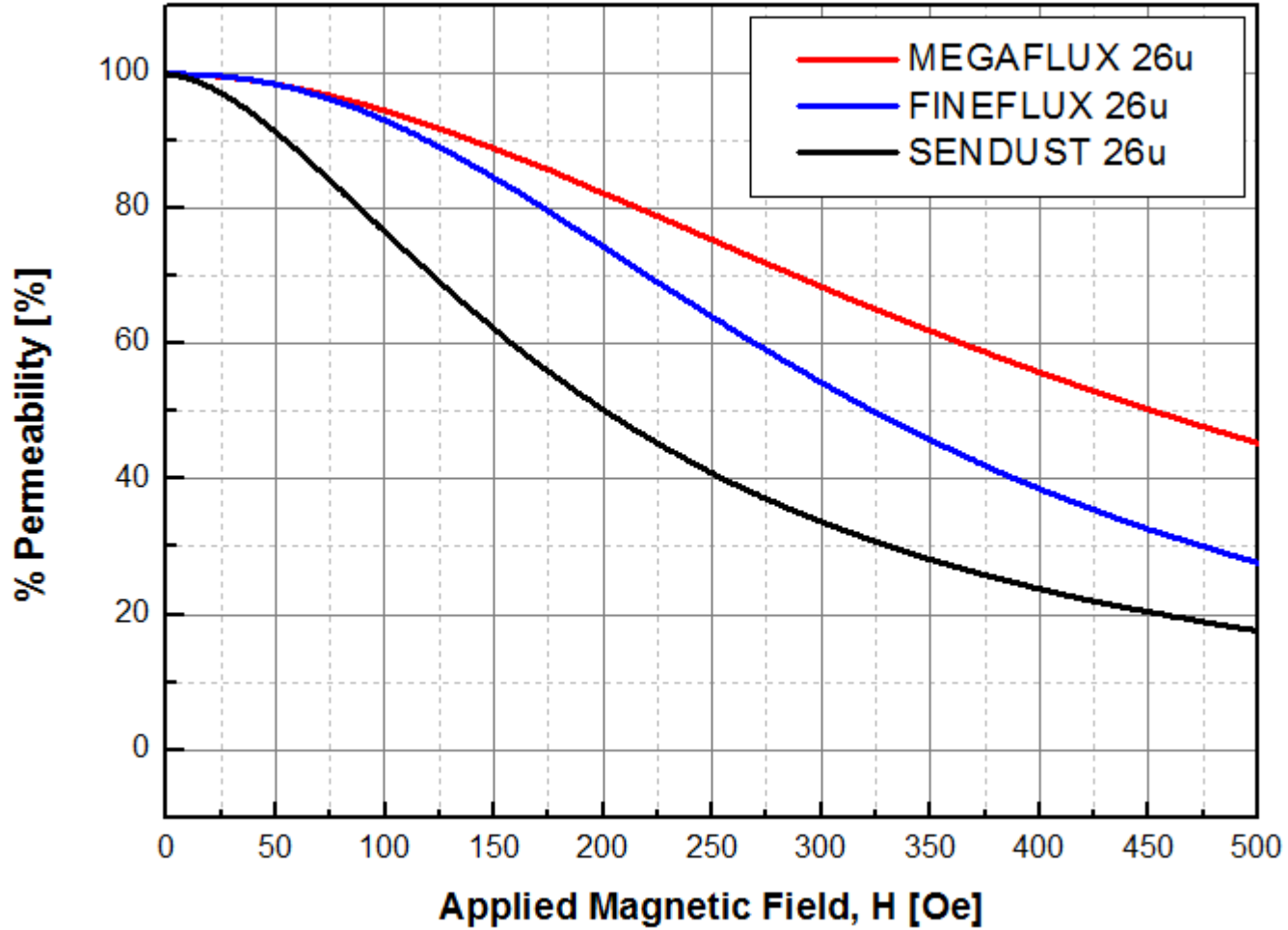
(1) Material Comparison

Material	60 μ DCB%			60 μ Core Loss	
	@100 Oe	@150 Oe	@200 Oe	@20kHz, 1000G	@50kHz, 1,000G
Fine Flux	59%	41%	28%	93	273
Mega Flux	78%	59%	44%	201	590
HS	71%	52%	37%	67	206
KS	61%	45%	34%	164	480
SENDUST	50%	32%	22%	99	279

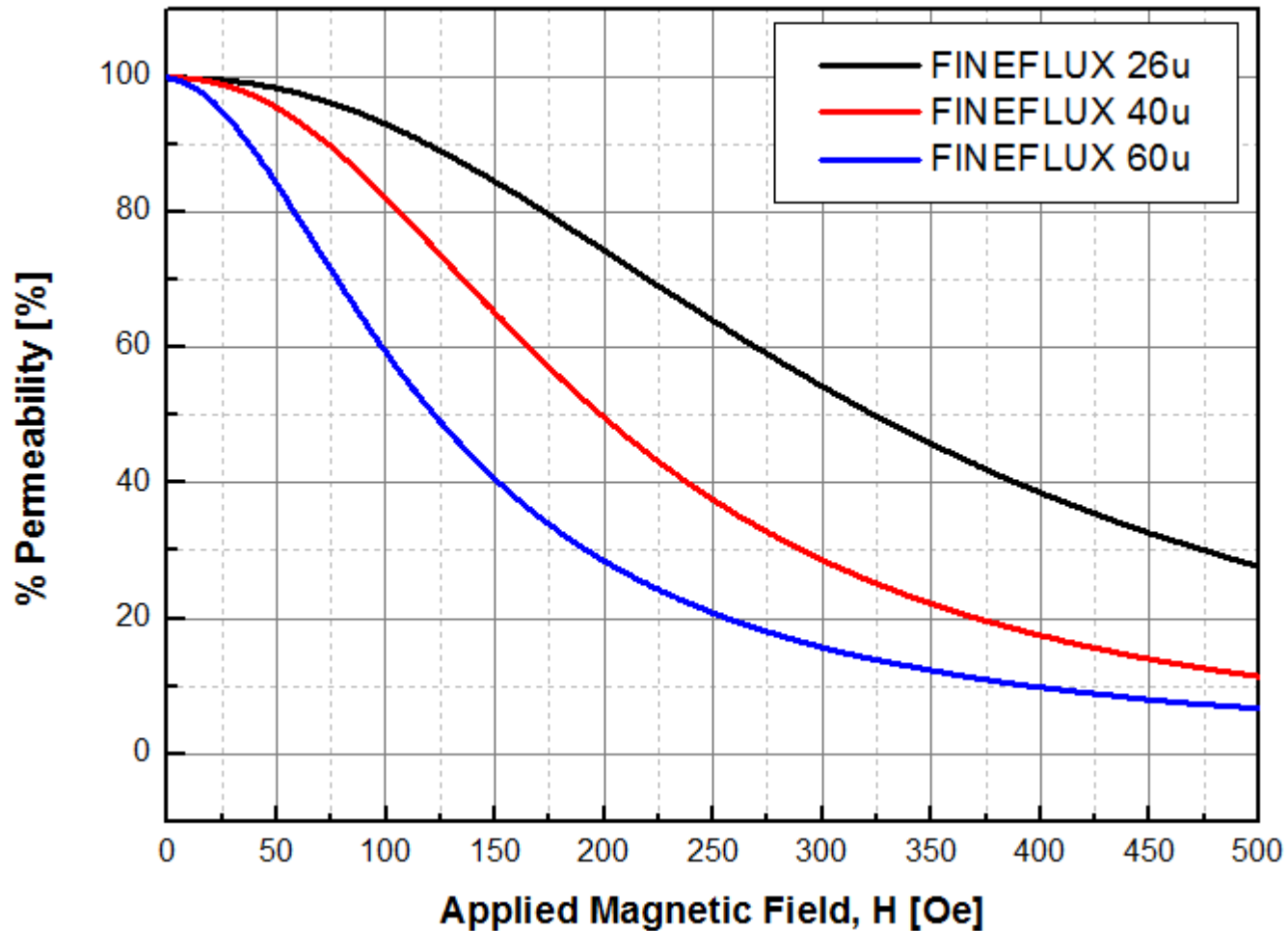
(2) Graph



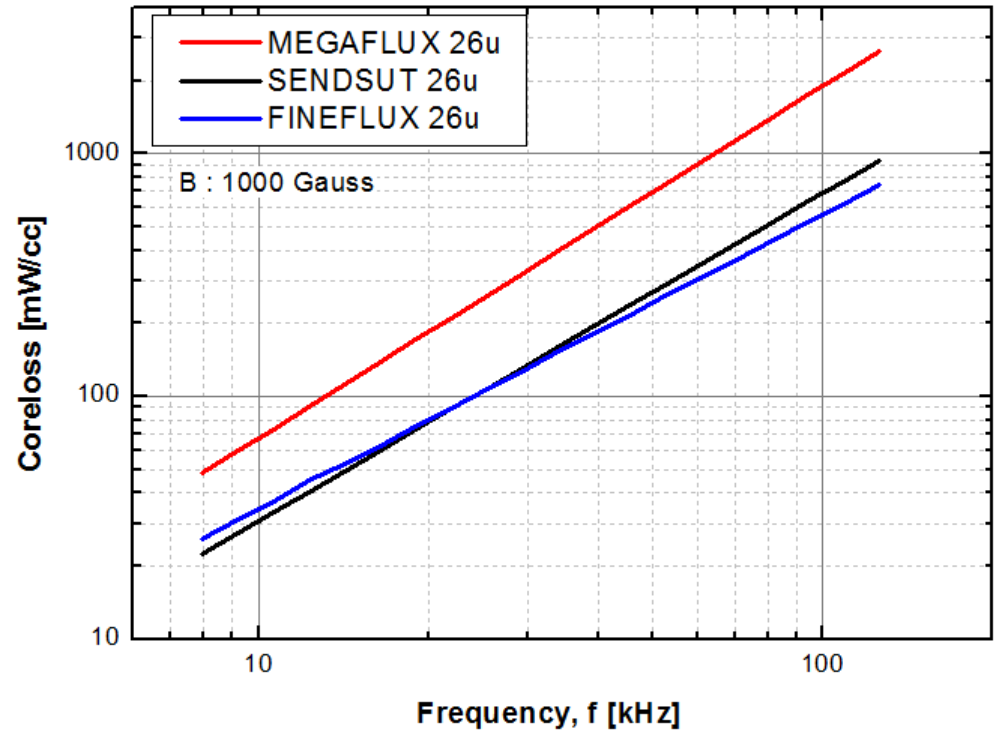
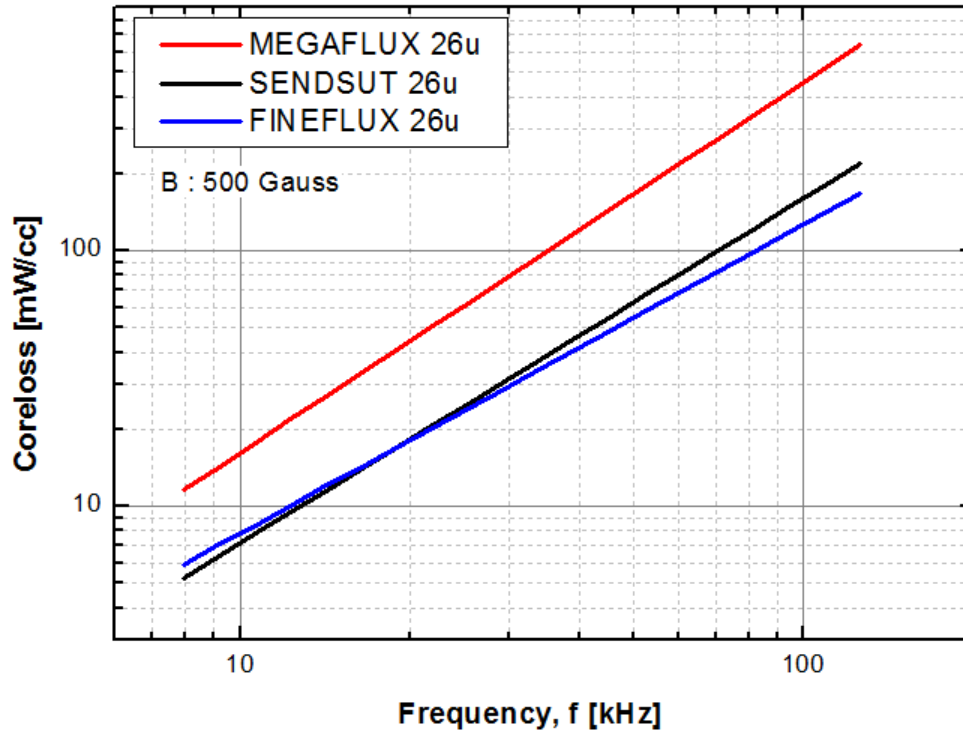
3-1. Fine Flux DCB-26 μ



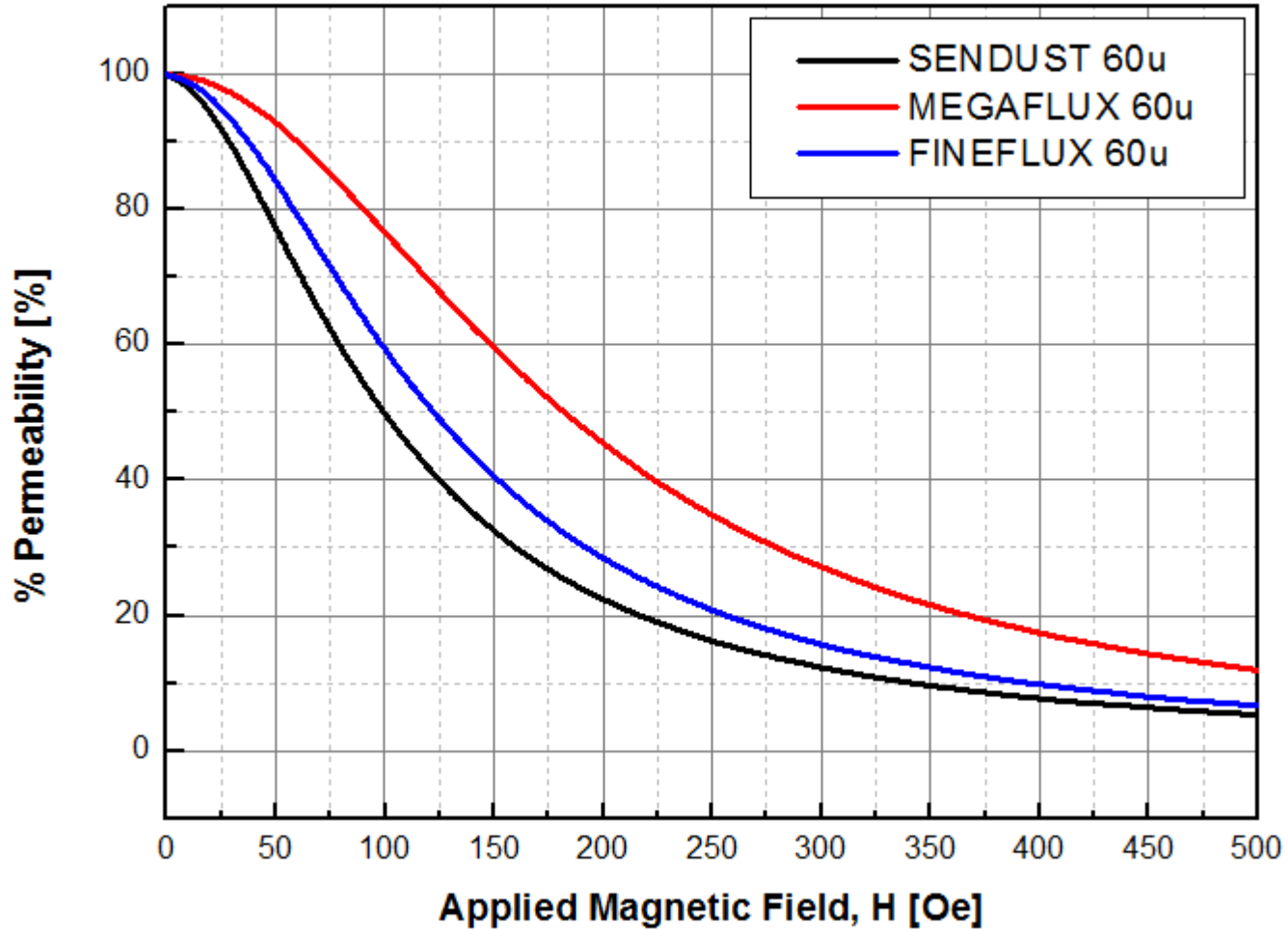
3-2. Fine Flux DCB - 26 μ , 40 μ , 60 μ



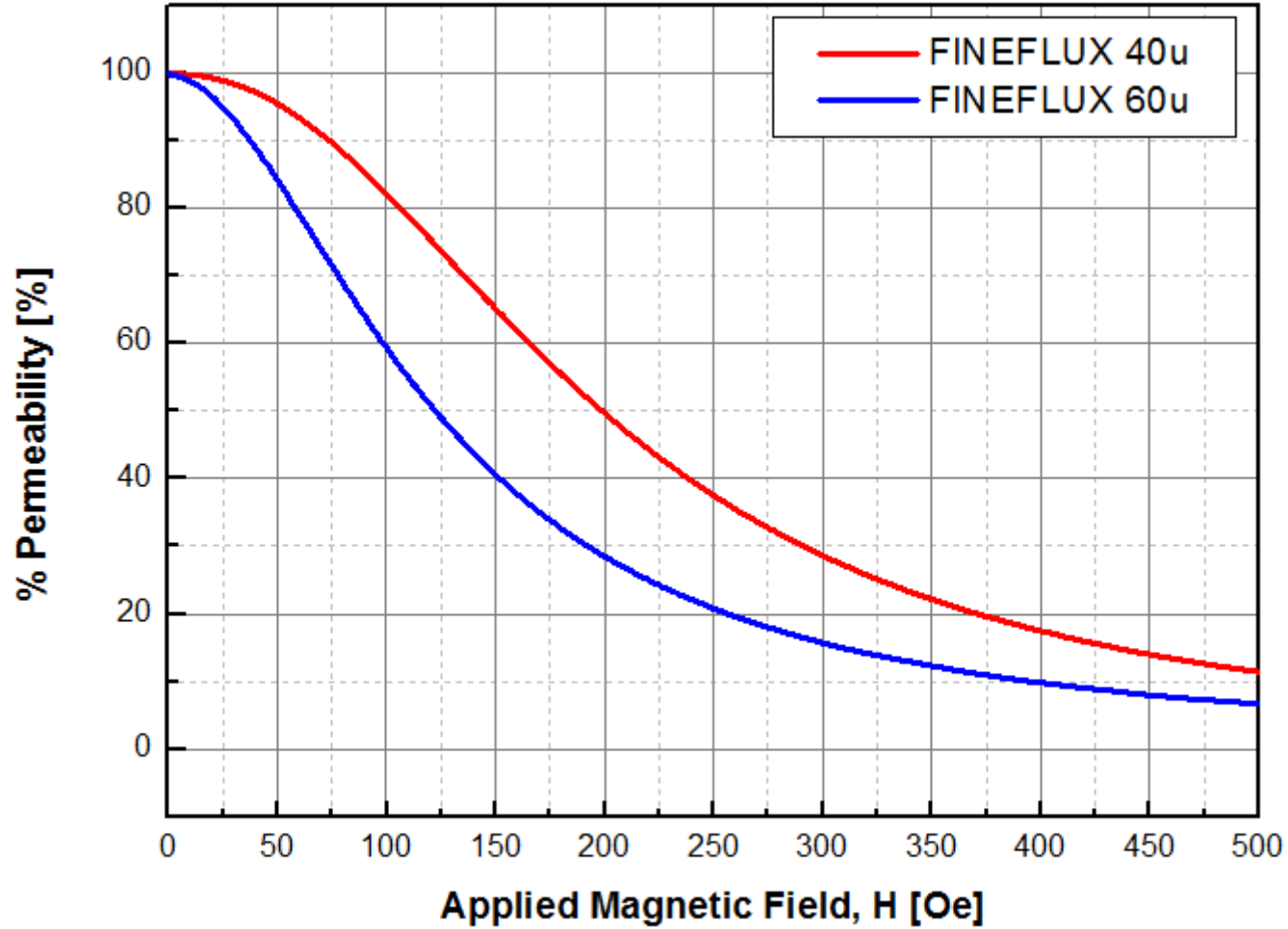
3-3. Fine Flux 26 μ Core losses



4-1. Fine Flux DCB-60 μ



4-2. Fine Flux DCB -40 μ ,60 μ



4-3. Fine Flux 40 μ , 60 μ Core losses

