

# LOW FREQUENCY MAGNETIC SHIELDING

## MuFerro-FS/ECFS

### Features

MuFerro is suitable for magnetic shielding in frequency ranges from DC to 100 kHz and is optimized for 50/60 Hz. MuFerro-FS (MFFS) combines permeability and saturation characteristics which makes it extremely suitable for screening low-frequency magnetic fields. MuFerro-ECFS (MFECS) enhances these characteristics with eddy current performance.

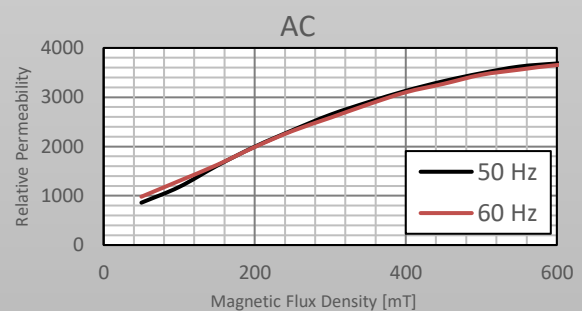
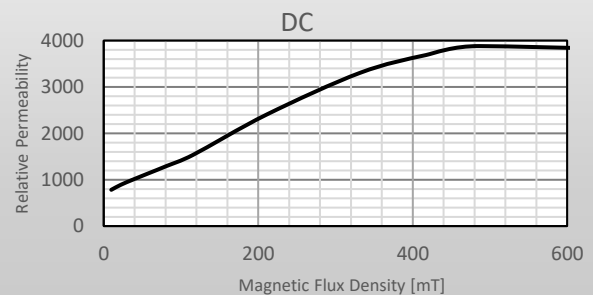


### Applications

- Transformer rooms (indoors or outdoors).
- Power plants.
- Aluminum melting/ production.
- High current applications that creates strong magnetic fields.
- Scientific lab.
- Busbars/cabling.
- Reduction of field-values to below exposure limitation recommendation.

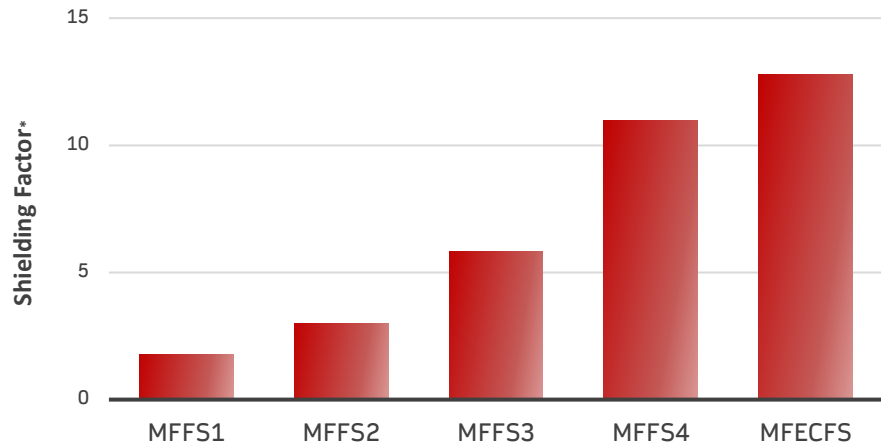
### Specifications

Property	Unit	MuFerro-FS	MuFerro-ECFS
		Value	Value
Density	g/cm <sup>3</sup>	8	4
Thickness	mm	0.7	4.7
Resistivity	Ohm·m	5E-7	3E-07
Curie Temperature	°C	400	400
Max. $\mu_r$ @ DC	-	3800	3800
Max. $\mu_r$ @ 50 Hz	-	3750	3750
Max. $\mu_r$ @ 60 Hz	-	3700	3700
Min Yield Strength	N/mm <sup>2</sup>	300	105
Min Tensile Strength	N/mm <sup>2</sup>	400	85
Hardness	N/mm <sup>2</sup>	150	30



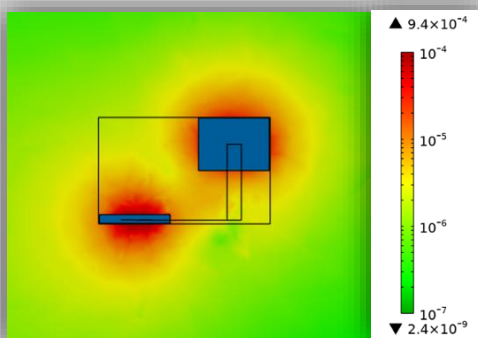
## Shielding Characteristics

The effectiveness of the shielding is expressed as the shielding factor. Different configurations will give different results in shielding effectiveness. MFFS can be applied in multiple layers to increase the shielding factor. MFECFS is spotwelded on location to create a uniform shield.

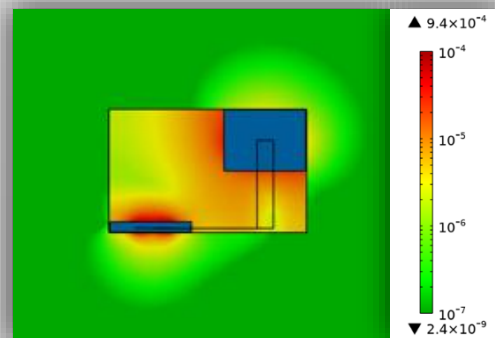


\*Please note: These values are for six-sided shielding measured under laboratory conditions. Results may vary in other situations; please read our Guarantee.

MuFerro shielding material ensures that magnetic fields are kept within a safe radius around the electrical equipment.



Magnetic field **before** applying MuFerro.



Magnetic field **after** applying MuFerro.

Holland Shielding Systems B.V. can implement magnetic shielding even after the transformer has been put into place. For shielding entire buildings, or rooms, the shielding material is applied to walls, ceilings and/or floors. This protects both people and electronics.

Before the shielding is ordered and installed, we can conduct a site survey (magnetic field strength measurement) for you. We not only measure the magnetic field strength but also locate its probable source. On request, the measurement results are presented in a report.