

超低損失Fe基アモルファス合金



Magnetic domain controlled low loss Fe-based amorphous alloys MaDC-A™

変圧器の省エネ、CO₂削減に貢献します。

Contributes to energy saving and CO₂ reduction of transformers.



概要 Overview

アモルファス合金に磁区制御(Magnetic Domain Control) 技術を適用することで、さらなる低損失化と高磁束密度化を実現

By applying magnetic domain control technology to amorphous alloys, we have achieved even lower losses and higher magnetic flux densities.

用途 Applications

配電用(柱上・地上設置)変圧器
産業用変圧器/分散型電源用変圧器
(太陽光発電、風力発電など)
整流用変圧器/小型産業用絶縁変圧器
Distribution Transformers(pole/ground installation)
Industrial Transformers/Distributed Power Transformers (Solar power generation, wind power generation, etc.)
Rectifying Transformer/Small Industrial Transformer

特徴 Feature

低損失化と高磁束密度B0.8(H=80 A/mの磁束密度)化を実現

Low loss and high magnetic flux density B0.8 (H=80 A/m magnetic flux density)

変圧器用鉄心としての鉄損を大幅に低減することが可能

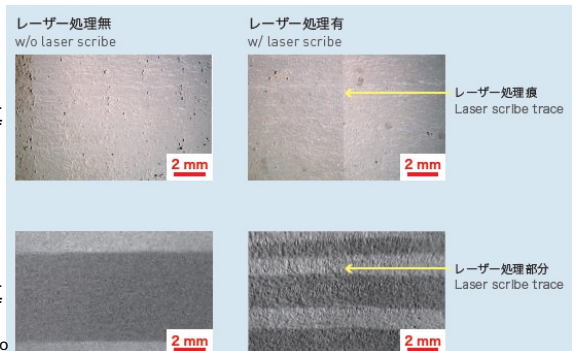
Possible to significantly reduce iron loss as a core for transformers

変圧器の無負荷損の一層の低減が図れ、負荷率の低い変圧器の電力消費削減とCO₂削減に貢献

No-load loss of transformers can be further reduced, contributing to the reduction of power consumption and CO₂ emissions of transformers with low load factors

表面および磁区観察写真 surface and magnetic domain

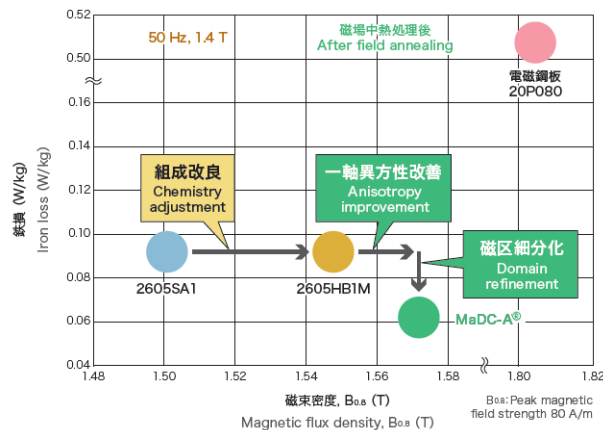
リボン
表面写真
Ribbon
surface photo



磁区
観察写真
magnetic
domain photo

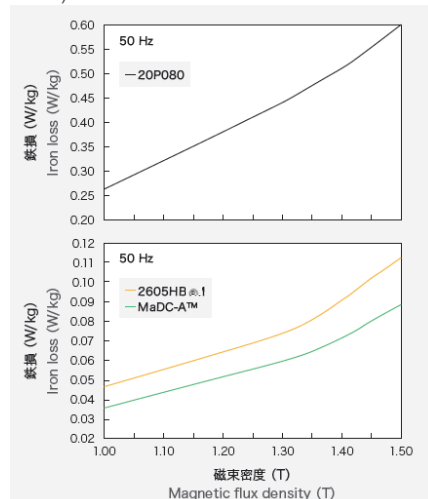
鉄損と磁束密度の関係(単板)

Relationship between iron loss and magnetic flux density (single plate)



鉄損の磁束密度依存性(単相配電用変圧器鉄心)

Magnetic flux density dependence of iron loss (single-phase distribution transformer core)



問合せ窓口

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