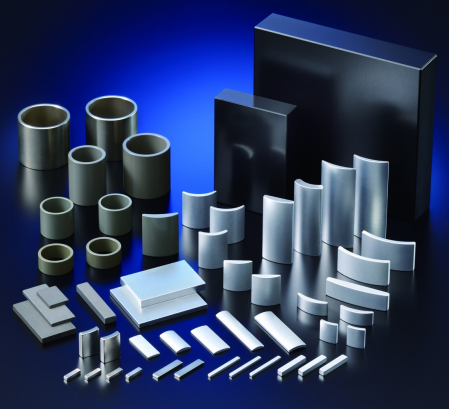
PROTERIAL

NEOMAX® の省重希土類技術

NEOMAX® with less Heavy Rare-Earth Technology

独自技術"M拡散™"の適用で資源リスク軽減と高性能化を両立

Achieve both reduction of resource risk and high performance by applying Proterial's original technology "M-diffusion™".



モーター向け技術コーナー

概 要

重希土類使用量を大幅に削減可能な技術”M拡散™”により高性能化と資源リスク軽減の両立を実現

Established technologies for "M-Diffusion™" with significant reduction of heavy rare-earth, which achieved both higher magnetic properties and further reduction of resource risk.

用 途

- モーター Motors
- アクチュエーター Actuators
- 発電機 Generators

特 長

独自技術”M拡散™”を適用することで以下の特長を実現

Following features achieved by applying Proterial's original technology "M-diffusion™".

■高い残留磁束密度と保磁力を両立
High remanence (B_r) and coercivity (H_{cJ})

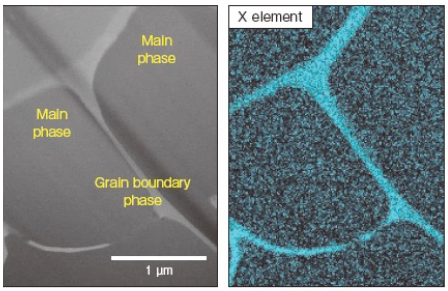
■重希土類量を大幅に削減*
Significant reduction of heavy rare-earth*

■磁石内の保磁力差を低減*
Reduction of coercivity difference in an individual magnet*

*当社従来拡散材比
*Compared to our magnet applied conventional diffusion process

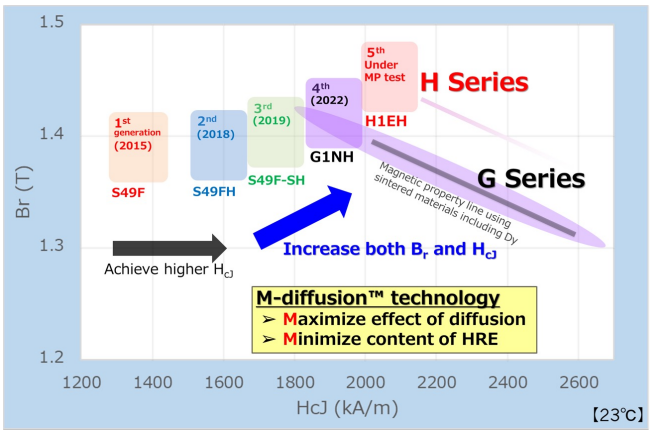
磁石断面組織と元素マップ(例)

Example of microstructure and X-element distribution



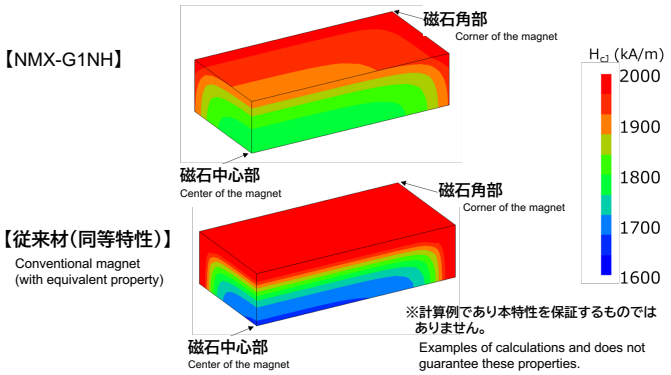
M拡散材の磁石特性

Magnetic properties of magnets applied "M-diffusion™" process (including forecast)



保磁力分布(計算例)

Example of simulation about distribution of coercivity in the magnets



磁石形状:5(磁化容易方向)×10×20 (mm)
Dimension of the magnet: 5(easy magnetization direction)×10×20 (mm)

実測データを用いて磁石の1/8の領域を計算
Calculation about one-eighth region of the magnets using actual magnetic properties

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