

NEOMAX® 省重稀土技术

NEOMAX® with less Heavy Rare-Earth Technology

运用独创的“M渗透™”技术，实现资源风险的降低与产品性能的提升

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



电机技术应用领域

概要

通过可以大幅削减重稀土使用量“M渗透™”技术，实现资源风险的降低和产品磁力特性的提升。

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

马达
Motors执行器
Actuators发电机
Generators

特点

通过使用独创的“M渗透™”技术

▼ 实现以下特点

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

■ 同时满足高剩磁和高内禀矫顽力的要求

High remanence (B_r) and coercivity (H_{cJ})

■ 大幅削减重稀土的使用量*

Significant reduction of heavy rare-earth*

■ 降低同一块磁体内部各部位之间的矫顽力差异*

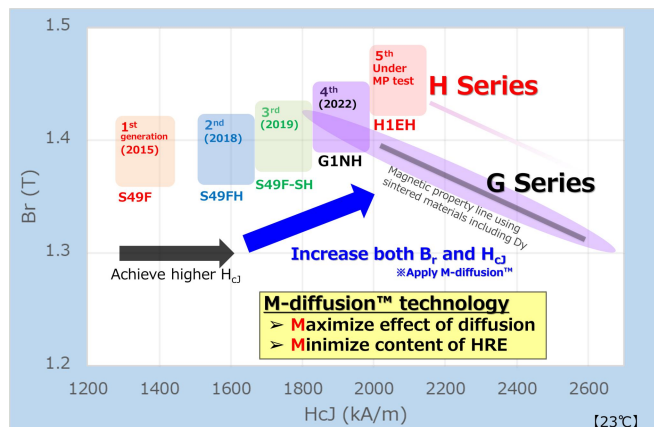
Reduction of coercivity difference in an individual magnet*

*和本公司常规渗透牌号的材比

*Compared to our magnet applied conventional diffusion process

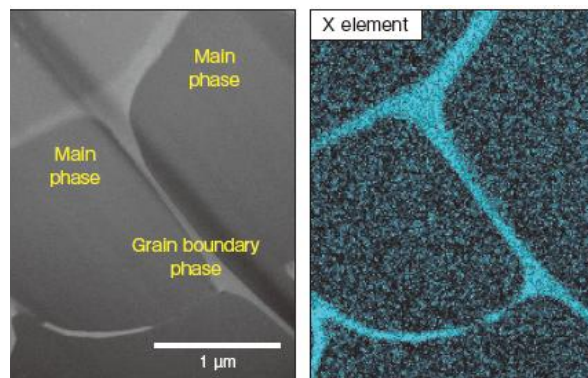
M渗透材料的磁力特性

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



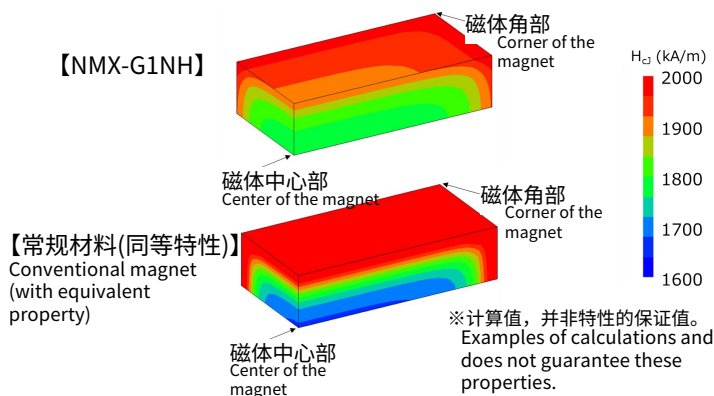
磁体微观结构和元素分布(例)

Example of microstructure and X-element distribution



内禀矫顽力的分布 (计算例)

Example of simulation about distribution of coercivity in the magnets



磁体形状：5(磁化容易方向)×10×20 (mm)

Dimension of the magnet: 5(easy magnetization direction)×10×20 (mm)

基于磁性能的实测数据在磁体的1/8区域进行计算

Calculation about one-eighth region of the magnets using actual magnetic properties