



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-diffusionTM".



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



特点

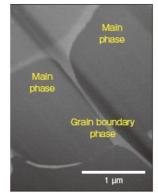
通过使用独创的"M渗透™"技术 ▼实现以下特点

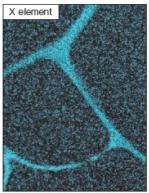
Following features achieved by applying Proterial's original technology "M-diffusion $^{\text{TM}}$ ".

- ■同时满足高剩磁和高内禀矫顽力的要求
 - High remanence (B_r) and coercivity (H_{c,l})
- ■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

磁体微观结构和元素分布(例)

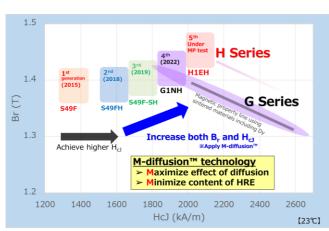
Example of microstructure and X-element distribution





<u>M渗透材料的磁力特性</u>

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



内禀矫顽力的分布(计算例)

Example of simulation about distribution of coercivity in the magnets 磁体角部 Corner of the H_c (kA/m) [NMX-G1NH] magnet 2000 1900 磁体中心部 Center of the mag 1800 磁体角部 Corner of the magnet 1700 【常规材料(同等特性)】 Conventional magnet 1600 (with equivalent ※计算值,并非特性的保证值。 Examples of calculations and property) 磁体中心部 does not guarantee these Center of the properties. magnet

磁体形状: 5(磁化容易方向)×10×20 (mm)

Dimension of the magnet: 5(easy magnetization direction) $\times 10 \times 20$ (mm)

基于磁性能的实测数据在磁体的1/8区域进行计算

 $\ \, \textbf{Calculation about on e-eighth region of the magnets using actual magnetic properties} \\$