

粉末用高絶縁・高耐食性コーティング剤

Coating Solution for High Insulation Performance and High Corrosion Resistance (To powder)

Protector PW-S

- 80°Cの熱処理で磁性材料などの粉末にシリカ膜を形成
Form silica-based thin coating on such as magnetic materials by heat treatment at 80°C
- 処理条件の調整で任意の膜厚に制御可能(〜約100 nm)
Can control film thickness by adjusting treatment condition(to about 100 nm)
- 磁性粉末に優れた絶縁性・耐食性を付与
Give high insulation performance and high corrosion resistance to magnetic powder

※試験は全て平均粒径 20 μmの鉄粉を使用
Use iron powder with an average particle diameter of 20 μm

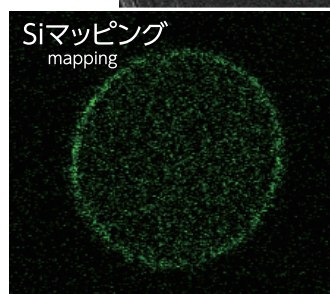
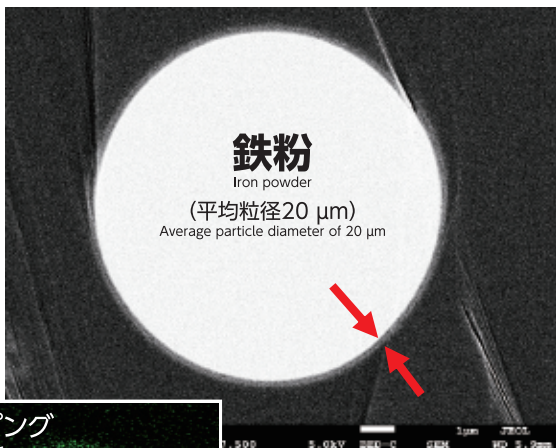
優れた絶縁性

Great insulation performance

	Protector PW-S 膜厚 約20 nm Thickness: about 20 nm	未処理 Untreated
体積抵抗率(Ω・cm) Volume resistivity	1.2×10^9	1.2×10^{-1}

均一なシリカ膜を形成

Form uniform silica film



観察倍率×7,500
Magnification

膜厚 約100 nm
Thickness: about 100 nm

優れた耐食性

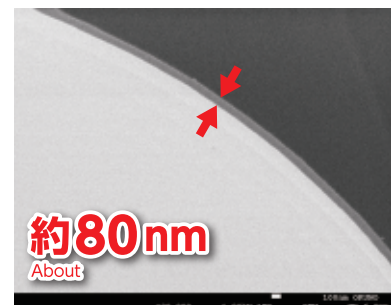
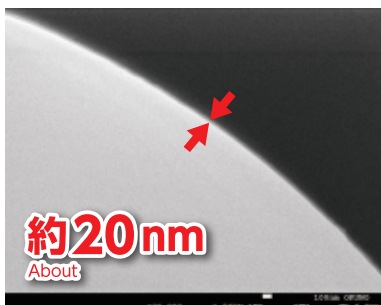
Great corrosion resistance

鉄粉を5%食塩水に浸漬し、錆の有無を観察した
Dip into 5% salt water, check rust occurrence

	Protector PW-S 膜厚 約10 nm Thickness: about 10 nm	未処理 Untreated
浸漬直後 Just after dipping		
放置後 After leaving	75日後 錆なし After 75 days, no rust	18時間後 赤錆発生 After 18 hours, occur rust

任意の膜厚に調整可能

Can control film thickness freely



観察倍率×30,000
Magnification