# 粉末用高絶縁・高耐食性コーティング剤

Coating Solution for High Insulating Property and High Corrosion Resistance (To powder)

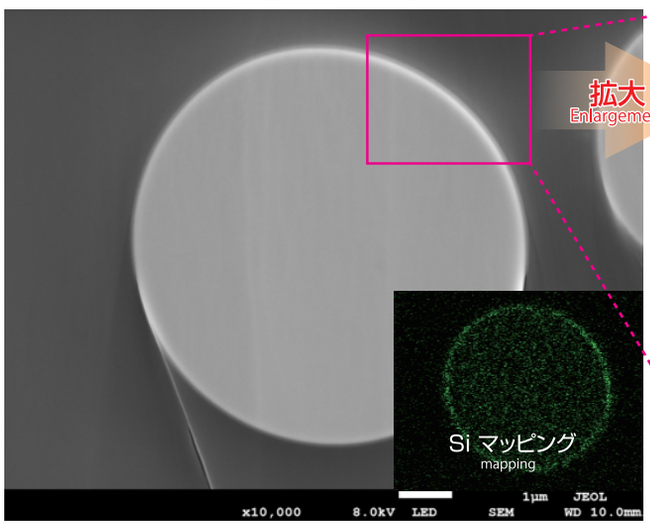
# Protector PW-S

●金属等の粉末に対して液相反応にてシリカコーティングが可能
Make silica-based coat to powder by liquid phase reaction

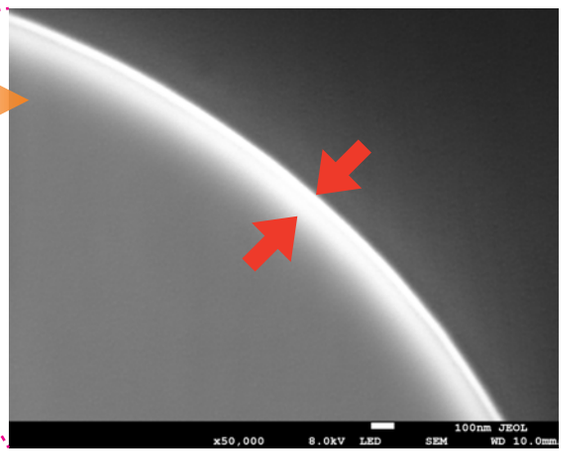
●膜厚のコントロールが容易
Control film thickness easily

●金属粉末に優れた絶縁性・耐食性を付与
Give high insulating property and high corrosion resistance to metallic powder

## 液相反応による粉末への均一なコーティング
Realize uniform coating to powder by liquid phase reaction




処理粉末の断面SEM像とEDS分析
Cross-sectional view and EDS analysis after treatment




素材：鉄粉（平均粒径：10μm）
Substrate Iron powder Average particle size
膜厚：約100nm
Thickness About

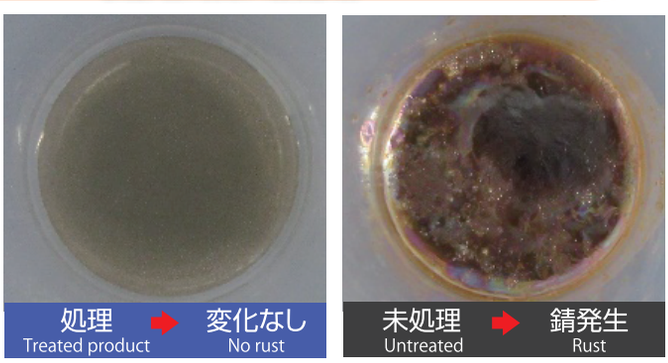
## 優れた絶縁性
Great insulation

| 処理<br>Treated product | 未処理<br>Untreated |
|---|---|
| ＞1MΩ | 60 Ω |

※試料サイズ：直径5mm×厚さ4mmの円柱状
Sample size diameter thickness column shape

各鉄粉に2wt%エポキシ樹脂を加えた
圧粉成形体の抵抗値を測定
Measure electrical resistance value of compression-molded powder
(Substrate: 98% of iron and 2% epoxy resin by weight)

## 優れた耐食性
Great corrosion resistance




5%食塩水に浸漬，168h大気下に放置(膜厚50nm)
Dip into 5% salt water and left in the atmosphere for 168h Film thickness
素材：鉄粉（平均粒径：10μm）
Substrate Iron powder Average particle size

## 処理方法
Process

**前処理**
Pre-treatment
アルカリ脱脂
Alkaline cleaning

→

**コーティング**
Coating
液相反応
Liquid phase reaction

→

**粉末回収**
Collect powder
ろ過等
Ex. Filtration

→

**乾燥**
Drying
80℃以上，20分
Over 80℃ min