

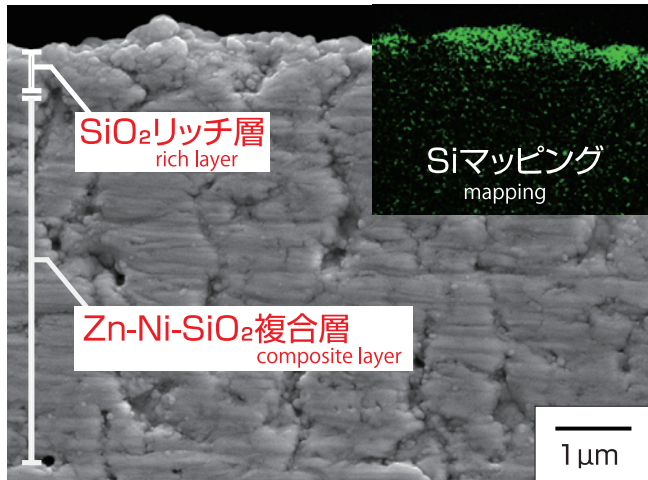
酸性塩化浴Zn-Ni-SiO₂複合めっき液

Chloride-based Acidic Zinc-nickel-silica Composite Plating Solution

ニコジンクACS NICOZINC ACS

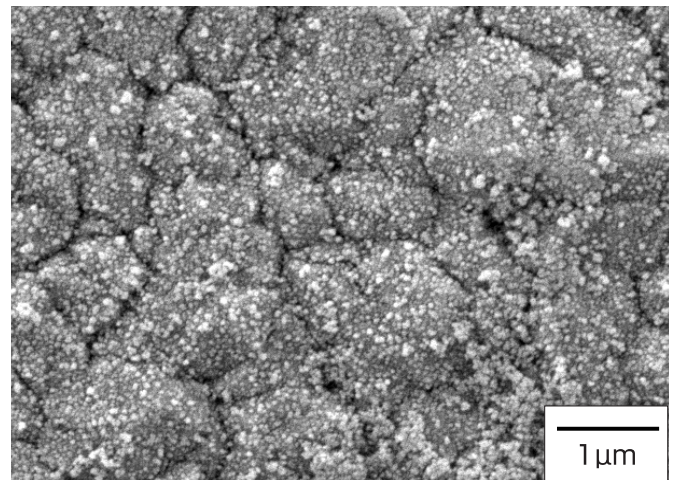
- 水素脆性が少なく、熱処理時間を短縮
Small hydrogen embrittlement, shorten heat treatment time
- 高い析出速度 (2A/dm² : 0.4μm/min) と電流効率 (80%)
High deposition rate High current efficiency
- 幅広い電流密度範囲で安定した合金比率 (Ni: 12~15wt%)
Obtain stable alloy ratio at wide current density area
- 高硬度 (Hv450) で低いトルク係数
High hardness, low torque coefficient

多孔性皮膜が水素を放出
Porous film releases hydrogen



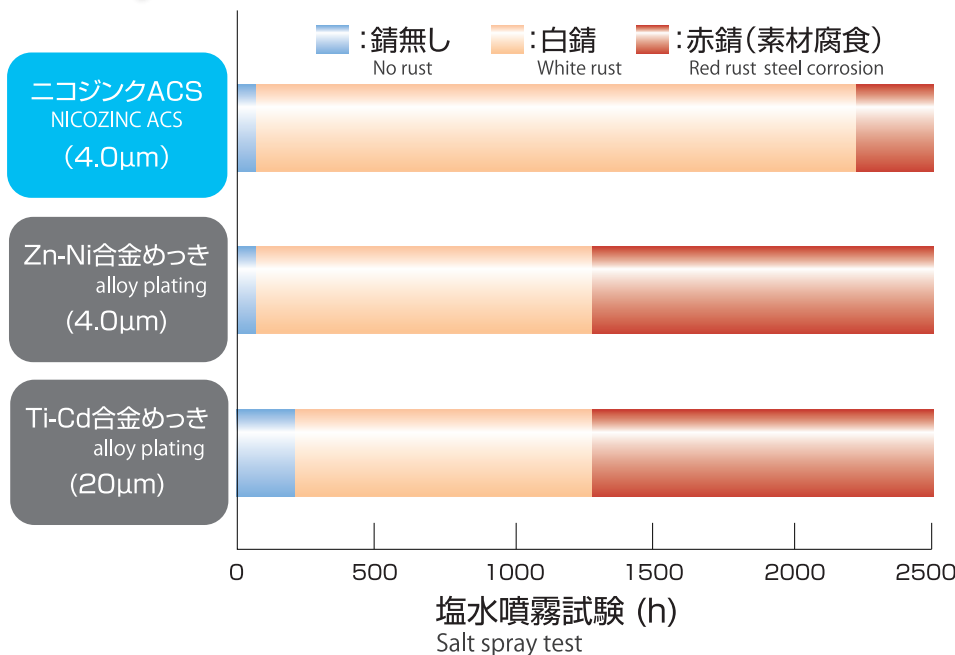
断面SEM像
SEM image (cross-section)

SiO₂粒子が表面に多く共析
Rich SiO₂ particles on surfaces



表面SEM像
SEM image (surface)

優れた耐食性
High corrosion resistance



標準処理条件
Standard condition

pH	2.0
浴温 Bath temperature	40°C
電流密度 Current density	2A/dm ²
攪拌 Agitation	空気攪拌 Air agitation
陽極 Anode	ニッケル Nickel
陰極 Cathode	鉄鋼 Steel