

# 高耐食性めっきプロセス

High Corrosion-Resistance Plating Process

# ニスタロイH/トップファインクロム

NISTALLOY H / TOP FINECHROME

- 従来のニッケル/6価クロムめっき皮膜より高耐食性を示すめっきプロセス
- 3価クロムめっき液トップファインクロムは6価クロムめっき皮膜と極めて近い色調を示す
- スズ-ニッケル合金めっき液ニスタロイHは耐食性に優れ、3価クロムめっき皮膜の耐食性を向上させる
- Can provide higher corrosion-resistance than conventional Nickel/Hexavalent Chromium plating film
- Can provide the same appearance as that by conventional process, since TOP FINECHROME, Trivalent Chromium plating process, exhibits the same level of color tone of appearance as that of Hexavalent Chromium plating film
- NISTALLOY H, Tin-Nickel alloy plating process, gives high corrosion-resistance, and enhances corrosion-resistance of Trivalent Chromium plating film

## 性能 Performance

### めっき皮膜構成と色調

Composition of Plating Films and Color Tones



従来プロセス  
Conventional process

L\* 82.34  
a\* -1.56  
b\* -1.27



高耐食プロセス  
High corrosion-resistance process

L\* 81.54  
a\* -1.15  
b\* +0.62

### CASS試験168時間後

Results of CASS test after 168 hrs.



従来プロセス  
Conventional process

R.N.:8.3

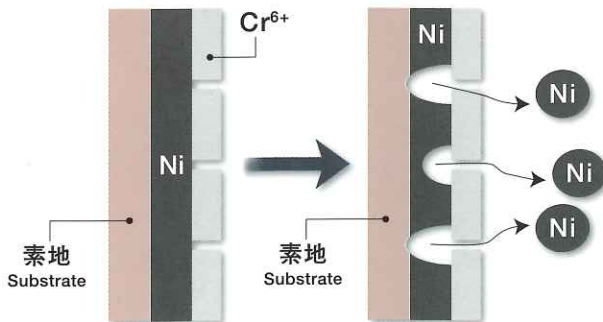
高耐食プロセス  
High corrosion-resistance process

R.N.:9.0

## 腐食機構 Mechanism of Corrosion

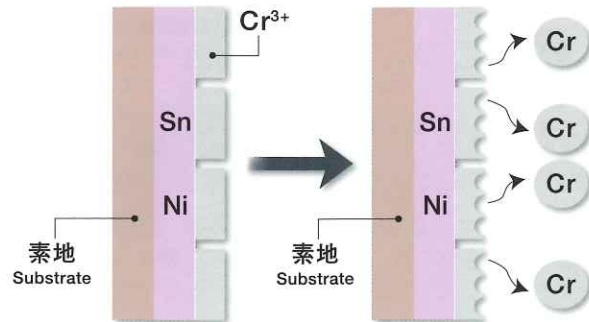
### 従来プロセス

Conventional process



### 高耐食プロセス

High corrosion-resistance process



従来のニッケル/6価クロムめっきプロセスでは下地ニッケル皮膜から溶解し腐食が全体的に進行一方、スズ-ニッケル/3価クロムめっきプロセスでは下地からの腐食が発生しないため高い耐食性が得られる

In case of conventional Nickel/Hexavalent Chromium plating process, Nickel plating film as an underlayer dissolves at the beginning, thereafter the corrosion proceeds as a whole  
In case of Tin-Nickel/Trivalent Chromium plating process, high corrosion-resistance is obtained since the underlayer does not corrode