

黒色ニッケルめっき液

# トップファルベNIBS

Black Nickel Plating Solution  
**TOP FARBE NIBS**

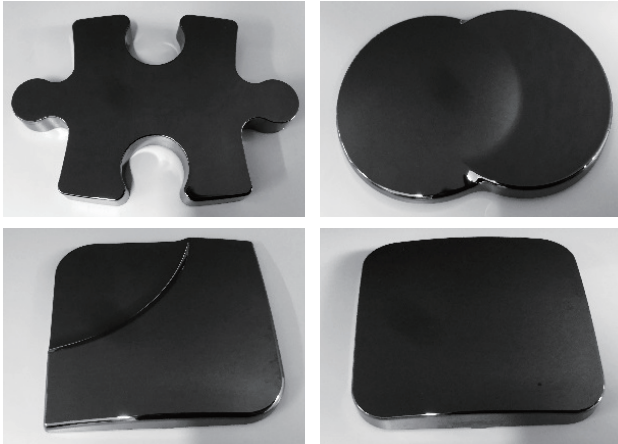
- 黒色の光沢ニッケルめっき皮膜が得られる
- めっき液は成分分析が可能で管理幅も広く使いやすい
- 静止、カゴ付けめっきなど幅広い用途で使用可能

- Black, bright nickel plating films are available
- Have wide control range, can easily analyze, user-friendly
- Can use by various plating methods such as rack-, basket-plating

## 均一なめっき外観

Plated appearances

L\* 38.35 a\* 0.43 b\* 2.76

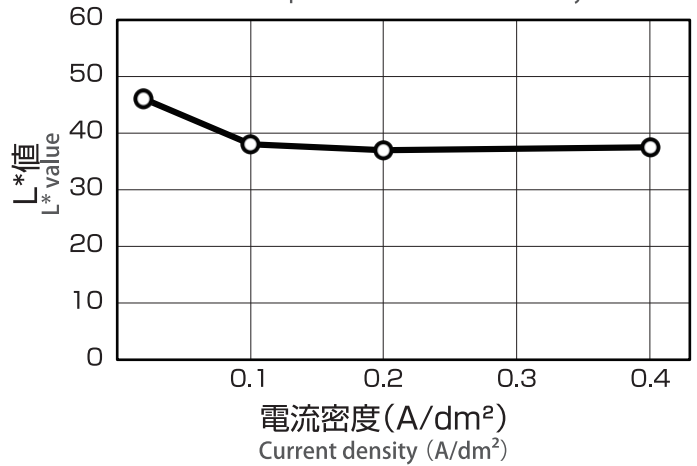


## 低電流密度で黒色化可能

Can obtain black tones by low current density areas

### 電流密度とL\*値の関係

Relationship of L\*value and current density



## 浴組成と作業条件

Bath composition & Working condition

|   |                                 |
|---|---------------------------------|
| トップファルベNIBS-コンク<br>TOP FARBE NIBS-CONC                  | 200ml/L                         |
| トップファルベNIBS-ソルト<br>TOP FARBE NIBS-SALT                  | 42.5g/L                         |
| (ニッケル:22g/L, 亜鉛:5.7g/L)<br>(Nickel :22g/L, Zinc:5.7g/L) |                                 |
| pH  | 4.5~6.0<br>to                   |
| 浴温<br>Bath temperature                                  | 30°C                            |
| 電流密度<br>Current density                                 | 0.05~0.5A/dm <sup>2</sup><br>to |
| めっき時間<br>Plating time                                   | 10分以上<br>Over 10 min            |

|                         |   |
|-------------------------|---|
| 陽極<br>Anode             | ニッケル板<br>Nickel plates                              |
| ろ過<br>Filtration        | 常時循環ろ過<br>Continuous filtration                     |
| 攪拌<br>Agitation         | ろ過による緩やかな液流動<br>Mild bath circulation by filtration |
| 加熱装置<br>Heater          | 耐酸性コーティングパイプ<br>Pipe with acid-resistant coat       |
| 槽材質<br>Tank material    | PP, PVC等<br>PP, PVC, etc.                           |
| 析出速度<br>Deposition rate | 0.11μm/min (0.2A/dm <sup>2</sup> )                  |