GÜVEN METAL®
SANAYİ VE TİCARET LİMİTED ŞİRKETİ

# TECHNICAL DATA SHEET

## Gme-SS304 Stainless Steel Cathode Wire

Product : Gme-SS304 Stainless Steel Cathode Wire
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| Chemical Composition | | | Specifications | Key Features | Typical Applications |
|---|---|---|---|---|---|
| Element | Min % | Max % | ASTM A313<br>ASTM A580<br>BS 970<br>BS 2056 | Good mechanical properties and corrosion resistance | Food processing<br>Springs<br>Engineered components<br>Wire mesh<br>Wire cloth<br>Hose braiding<br>Gold mining<br>Silver mining |
| C | - | 0.07 | | | |
| Mn | - | 2.00 | | | |
| P | - | 0.045 | **Designations** | | |
| S | - | 0.030 | W.Nr. 1.4301<br>W.Nr. 1.4307<br>UNS S30400<br>AWS 161 | | |
| Si | - | 1.00 | | | |
| Cr | 17.50 | 19.50 | | | |
| Ni | 8.00 | 10.50 | | | |

| | | |
|---|---|---|
| ***Density*** | 8.0 g/cm³ | 0.289 lb/in³ |
| ***Melting Point*** | 1454 °C | 2650 °F |
| ***Coefficient of Expansion*** | 18.2 µm/m °C (20 – 100 °C) | 10.1 x $10^{-6}$ in/in °F (70 – 212 °F) |
| ***Modulus of Rigidity*** | 70.3 kN/mm² | 10196 ksi |
| ***Modulus of Elasticity*** | 187.5 kN/mm² | 27195 ksi |

***Heat Treatment of Finished Parts***

| Condition as supplied by Alloy Wire | Type | Temperature | | Time (Hr) | Cooling |
|---|---|---|---|---|---|
| | | °C | °F | | |
| Annealed or Spring Temper | Stress Relieve | 250 | 480 | 1 | Air |

***Properties***

| Condition | Approx. tensile strength | | Approx. operating temperature | |
|---|---|---|---|---|
| | N/mm² | ksi | °C | °F |
| Solution Annealed | 600 – 800 | 87 – 116 | -200 to +300 | -330 to +570 |
| Spring Temper | 1300 – 2200 | 189 – 319 | -200 to +300 | -330 to +570 |

The above tensile strength ranges are typical. If you require different please ask.

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