

OK Autrod 16.95

A continuous solid, corrosion resisting chromium-nickel-manganese wire for welding of austenitic stainless alloys of 18% Cr, 8% Ni, 7% Mn types. OK Autrod 16.95 has a general corrosion resistance similar to that of the corresponding parent metal. The higher silicon content improves the welding properties, such as wetting. The product is a modified variant of ER307, basically with a higher Mn content to make the weld less sensitive to hot cracking. When used for joining dissimilar materials the corrosion resistance is of secondary importance. The alloy is used in a wide range of applications across the industry such as the joining of austenitic, manganese, work hardenable steels as well as armour plates and heat resistant steels.

Specifications

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|------------------------|---------------------------------------------------------------------------------------|
| Classifications | EN ISO 14343-A : G 18 8 Mn SFA/AWS A5.9 : ER307 (mod) Werkstoffnummer : ~1.4370 |
| Approvals | CE : EN 13479 DB : 43.039.10 UKCA : EN 13479 VdTÜV : 05420 |

Approvals are based on factory location. Please contact ESAB for more information.

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|----------------------|----------------------------------------|
| Alloy Type | Austenitic (18 % Cr - 8 % Ni - 7 % Mn) |
| Shielding Gas | M12, M13 (EN ISO 14175) |

Typical Tensile Properties

| Condition | Yield Strength | Tensile Strength | Elongation |
|-----------|----------------|------------------|------------|
| As Welded | 450 MPa | 640 MPa | 41 % |

Typical Charpy V-Notch Properties

| Condition | Testing Temperature | Impact Value |
|-----------|---------------------|--------------|
| As Welded | 20 °C | 130 J |

Typical Wire Composition %

| C | Mn | Si | Ni | Cr | Mo |
|------|-----|-----|-----|------|------|
| 0.08 | 7.0 | 0.9 | 8.1 | 18.7 | 0.20 |

Deposition Data

| Diameter | Current | Voltage |
|----------|-----------|---------|
| 0.8 mm | 55-160 A | 15-24 V |
| 0.9 mm | 65-220 A | 15-28 V |
| 1.0 mm | 80-240 A | 15-28 V |
| 1.2 mm | 100-300 A | 15-29 V |
| 1.6 mm | 230-375 A | 23-31 V |