



Characteristics and scope of application

- Filler metal for 9% Ni steels in cryogenic applications e. g. LNG tanks
- Excellent strength down to -196°C

Standard designations

| | | |
|-----------------------|----------|--------------|
| DIN DIN EN ISO 18274 | AWS 5.14 | DIN Mat.-No. |
| S Ni 1008 (NiMo19WCr) | ERNiMo-8 | - |

Typical chemical composition of filler metal

| | C | Si | Mn | Cr | Ni | Mo | Fe | W | Al | Ti |
|--------|------|------|-----|-----|------|----|-----|-----|-----|-----|
| Mass % | 0.03 | 0.15 | 0.2 | 2.0 | Bal. | 19 | 6.0 | 3.0 | 0.2 | 0.2 |

All weld metal properties (min. values at rt)

| Heat treatment | Yield strength | Tensile strength | Elongation | Impact toughness | |
|----------------|-------------------|------------------|----------------|------------------|----------------|
| | R _{p0.2} | R _m | A ₅ | ISO-V | |
| as welded | 430 MPa | 720 MPa | 35% | 100 J | 100 J / -196°C |

Welding instructions

| Polarity | Shielding gas acc. to DIN EN ISO 14175 |
|----------|--|
| DC / + | I1 |
| DC / - | I1 |

Low heat input and interpass temperature. Stringer bead technique recommended.

Base materials

1.5662, 1.5663

ASTM A 333 Gr. 8

ASTM A 353 – UNS K81340

ASTM A 553 – UNS K81340

Packaging (tolerances acc. to DIN EN ISO 544)

| Diameter (mm) | | Kg |
|-----------------------|---------------------|--------|
| 1.6 / 2.0 / 2.4 / 3.2 | X 1000 mm | 5 / 10 |
| 0.8 / 1.0 / 1.2 | BS 300 spool | 15 |
| 1.6 / 2.4 / 3.2 | K 415 / K 435 spool | 25 |

Approvals on request