

LNМ 309LSi

TOP FEATURES

- The weld metal has a delta-ferrite content of ~12% resulting in a high resistance to hot cracking.
- The increased silicon content results in increased weld pool fluidity to give a smooth deposit appearance.
- Also used for the welding of clad steels where service temperatures are below 300°C.

TYPICAL APPLICATIONS

- General fabrication
- Transport
- Process Industries

CLASSIFICATION

| | |
|----------------|--------------|
| AWS A5.9 | ER309LSi |
| EN ISO 14343-A | G 23 12 L Si |

SHIELDING GASES (ACC. EN ISO 14175)

| | |
|-----|--------------------------------------|
| M12 | Mixed gas Ar+ 0.5-5% CO ₂ |
| M13 | Mixed gas Ar+ 0.5-3% O ₂ |

APPROVALS

| | | | |
|-----|-----|----|----|
| DNV | TÜV | DB | CE |
| + | + | + | + |

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, WIRE

| | | | | | |
|------|-----|-----|------|------|------|
| C | Mn | Si | Cr | Ni | Mo |
| 0.02 | 1.8 | 0.8 | 23.3 | 13.8 | 0.14 |

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| | Shielding gas | Condition* | 0.2% Proof strength (MPa) | Tensile strength (MPa) | Elongation (%) | Impact ISO-V (J) | |
|----------------|---------------|------------|---------------------------|------------------------|----------------|------------------|-------|
| | | | | | | +20°C | -20°C |
| Typical values | M12 | AW | 436 | 582 | 37 | 87 | 80 |

* AW = As welded

PACKAGING AND AVAILABLE SIZES

| Wire diameter (mm) | Packaging | Weight (kg) | Item number |
|--------------------|---------------|-------------|-------------|
| 0.8 | SPOOL (BS300) | 15.0 | 581669 |
| 0.9 | SPOOL (BS300) | 15.0 | 581770 |
| 1.0 | SPOOL (BS300) | 15.0 | 595789 |
| | DRUM | 250.0 | 581708 |
| 1.2 | SPOOL (BS300) | 15.0 | 595796 |
| | DRUM | 250.0 | 581710 |

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing.
Please refer to www.lincolnelectric.eu for any updated information.