



# MWT 309LSi

Stainless Steel MIG Welding Wire – **AWS A5.9/ASME SFA-A5.9: ER309LSi**

## Key Benefits

- Excellent welding properties and weld bead appearance
- Added Silicon level for increased weld puddle fluidity and toe wetting.
- Excellent resistance to general corrosion as well as pitting and intercrystalline corrosion in chlorinated environments
- Controlled Ferrite content for maximum corrosion resistance

## Typical applications

- Welding of austenitic stainless steels of type 18% Cr, 10% Ni and 3% Mo.
- Widely used in chemical and food processing industries

## Conformity and Approvals

|                  |                    |
|------------------|--------------------|
| AWS A5.9:        | ER309LSi, ER309LSi |
| ASME SFA-A5.9:   | ER309LSi, ER309LSi |
| CWB/CSA W-48-14: | ER309LSi           |
| EN ISO 14343-B:  | SS309LSi           |
| ABS:             | E309LSi, ER309LSi  |
| ISO 14343-2009   | SS309LSi           |

## Welding Positions

All

## Shielding Gas

100% Ar  
Flow rate: 8-16 CFH

## Wire Composition as per AWS A5.9/A5.9M ER309LSi

|  | %C                 | %Mn                | %Si               | %S                 | %P                 |
|--|--------------------|--------------------|-------------------|--------------------|--------------------|
| <b>Requirements - AWS ER309LSi</b><br>Typical Wire Composition | 0.03 max.<br>0.017 | 1.0-2.5<br>1.86    | 0.65-1.00<br>0.85 | 0.03 max.<br>0.007 | 0.03 max.<br>0.026 |
|  | %Cr                | %Ni                | %Mo               | %Cu                | %N <sub>2</sub>    |
| <b>Requirements - AWS ER309LSi</b><br>Typical Wire Composition | 23.0-25.0<br>23.26 | 12.0-11.0<br>12.75 | 0.75 max<br>0.030 | 0.75 max.<br>0.04  | -<br>0.14          |

## Mechanical Properties as required per AWS A5.9/A5.9M ER309LSi

|  | Yield Strength<br>MPa (ksi) | Tensile Strength<br>MPa (ksi) | Elongation<br>(%) | Impact Energy<br>(J) |              | FN<br>(WRC-1992) |
|--|-----------------------------|-------------------------------|-------------------|----------------------|--------------|------------------|
| <b>Typical Results (all weld metal)</b><br>As Welded | 450 (65)                    | 600 (87)                      | 32                | +20°C<br>160         | -110°C<br>90 | 7                |

**Ordering Information**

| Product Number | Product (AWS Specification) | Dimension mm/inch     | Single Pack Weight kg/lb | Box Weight kg/lb |
|----------------|-----------------------------|-----------------------|--------------------------|------------------|
| MWT309LSI16    | MWT 309LSi (ER 309LSi)      | 1.6 x 1000 mm (1/16") | 5 kg (11.0 lb)           | 20 kg (44.0 lb)  |
| MWT309LSI24    | MWT 309LSi (ER 309LSi)      | 2.4 x 1000 mm (3/32") | 5 kg (11.0 lb)           | 20 kg (44.0 lb)  |
| MWT309LSI32    | MWT 309LSi (ER 309LSi)      | 3.2 x 1000 mm (1/8")  | 5 kg (11.0 lb)           | 20 kg (44.0 lb)  |
| MWT309LSI40    | MWT 309LSi (ER 309LSi)      | 4.0 x 1000 mm (5/32") | 5 kg (11.0 lb)           | 20 kg (44.0 lb)  |



Box (20.0 kg)



Single Tube (5.0 kg)