



DATA SHEET
DS 126
Rev. 02 dd 23/07/2014
INETIG INOX 308 LSI

I.N.E. S.p.A.
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CLASSIFICATION

| AWS SPECIFICATIONS | EN SPECIFICATIONS |
|-------------------------|-----------------------------|
| AWS A 5.9: ER308LSi | EN ISO 14343-A: W 19 9 L Si |
| AWS A 5.9M: ER308LSi | |
| ASME SFA 5.9: ER308LSi | |
| ASME SFA 5.9M: ER308LSi | |

APPROVALS

| TÜV | DB | |
|-----|----|--|
| | | |
| | | |

ALLOY TYPE

308L for welding stainless steel.

APPLICATIONS

Tig rod with low carbon concentration designed for welding stainless steel with 18% Cr and 8% Ni content with service temperature in the range of -100°C and 400°C. Thanks to the higher silicon content its arc stability gets improved, it gives good-looking weld bead and very limited spattering. It finds application in general and architectural fabrication, pharmaceutical equipment, food industry and nuclear engineering. High corrosion resistance in an oxidizing environment.

MATERIALS TO BE WELDED

| ASTM | | EN | Others |
|--------|--------------|---------------------------|--------|
| 304 | A 157 Gr C9 | 10088-1/-2 X2CrNi 19-11 | |
| 304 L | A 320 Gr B8C | 10088-1/-2 X2CrNiN 18-10 | |
| 304 LN | A 320 Gr D | 10088-1/-2 X4CrNi 18-10 | |
| CF3 | | 10213-4 GX5CrNi 19-10 | |
| CF8 | | 10088-1/-2 X6CrNiTi 18-10 | |
| | | 10088-1/-2 X6CrNiNb 18-10 | |
| | | 10213-4 GX5CrNiNb 19-10 | |

WELDING GUIDELINES

Preheat and PWHT are not required. Maximum interpass temperature 200°C.

TECHNICAL INFORMATION

Gas: Argon 100% (EN ISO 14175)
 Welding positions: all positions



WELDING PARAMETERS
PACKAGING DATA

| Current | DC - Straight polarity |
|---------|------------------------|
|---------|------------------------|

| Diameter (mm) | 1.2 | 1.6 | 2.0 | 2.4 | 3.2 | 4.0 |
|---------------|---------|---------|---------|---------|---------|---------|
| Length (mm) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Carton | 5/25 Kg | 5/25 Kg | 5/25 Kg | 5/25 Kg | 5/25 Kg | 5/25 Kg |

* tolerances according to EN ISO 544 specification



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TYPICAL CHEMICAL COMPOSITION OF WIRE

| C % | Mn % | Si % | Cr % | Ni % | Mo % | Cu % | | | |
|-------|------|------|-------|-------|------|------|--|--|--|
| 0.025 | 1.80 | 0.85 | 20.00 | 10.00 | 0.10 | 0.10 | | | |

TYPICAL MECHANICAL PROPERTIES

| GAS | | Yield strength | Tensile strength | Elongation on % 5d | Impact energy (Charpy V) | | | | |
|-----|-----------|----------------|------------------|--------------------|--------------------------|---------|---------|---------|---------|
| | | Rs | Rm | A 5d | + 20°C | 0°C | -20°C | -40°C | -60°C |
| | | (MPa) | (MPa) | % | (Joule) | (Joule) | (Joule) | (Joule) | (Joule) |
| I1 | as welded | 470 | 640 | 36 | > 47 | - | - | - | - |

PRODUCTS AVAILABLE

| Process | Product | Classification AWS | Classification EN |
|-----------------------|---------------------|---------------------|---------------------------|
| MIG/MAG Solid wire | INEFIL INOX 308 LSI | AWS A 5.9: ER308LSi | EN 14343-A: G 19 9 L Si |
| TIG Rods | | | |
| SAW Submerged arc | | | |
| FCAW Cored wire | | | |
| SMAW Electrodes | INOX 308 RLC | AWS A 5.4: E308L-17 | EN ISO 3581-A: E 19 9 L R |