



Cromatig 309LSi

GTAW - TIG
Stainless Steel

Date: 2008-08-29
Revision: 8

Description:

Cromatig 309LSi deposits a 24% Cr / 13% Ni austenitic stainless steel weld metal with a nominal ferrite content of FN 10. The relatively high alloy and ferrite levels enable the weld metal to tolerate dilution from mild or low alloyed steels without hot cracking. The higher silicon content provides a more fluid weld pool which may be preferred for certain welding applications.

Applications:

- Buffer layers on mild and low alloy steels prior to overlaying with MIG/TIG 308L.
- Joining of clad steels and dissimilar joints between stainless and mild or low alloy steels.
- Welding of similar composition, 309L type, stainless steels.
- Joining of ferritic-martensitic stainless steels.

Welding current:

DC-

Wire composition, wt.%

| | C | Si | Mn | P | S | Cr | Ni |
|---------|-------|------|-----|-------|-------|------|------|
| Min | | 0,65 | 1,0 | | | 22,0 | 11,0 |
| Typical | 0,02 | 0,8 | 1,8 | 0,015 | 0,01 | 23,5 | 13,5 |
| Max | 0,030 | 1,00 | 2,5 | 0,03 | 0,020 | 25,0 | 14,0 |

| | Mo | Cu | N |
|---------|------|------|------|
| Min | | | |
| Typical | 0,10 | 0,10 | 0,06 |
| Max | 0,30 | 0,30 | |

Shielding gas:

Acc. to EN 439:

I1, Ar 99.99%, 6-12 l/min

Stamping

Elga, AWS, Wst, EN, Batch

Ferrite content:

FN 11

Chemical composition, wt.%

| | C | Si | Mn | P | S | Cr | Ni |
|---------|------|-----|-----|-------|------|------|------|
| Min | | | | | | | |
| Typical | 0,02 | 0,7 | 1,6 | 0,015 | 0,01 | 23,0 | 13,0 |
| Max | | | | | | | |

| | Mo |
|---------|-----|
| Min | |
| Typical | 0,1 |
| Max | |

Mechanical properties

| | <u>Specified</u> | <u>Typical</u> |
|-------------------------|------------------|-------------------------------|
| Yield strength, Rp0.2%: | ≥ 350 MPa | 450 MPa |
| Tensile Strength, Rm: | ≥ 520 MPa | 650 MPa |
| Elongation, A5 | ≥ 30% | 35% |
| Impact energy, CV: | | 20°C • 130 J -120°C • 65 J |

Classification:

EN ISO 14343 W 23 12 LSi
AWS A5.9 ER309LSi

Approvals:

TüV

Product data:

| Diam.mm | Length mm | Product code |
|---------|-----------|--------------|
| 1,2 | 1000 | 9805-1012 |
| 1,6 | 1000 | 9805-1016 |
| 2,0 | 1000 | 9805-1020 |
| 2,4 | 1000 | 9805-1024 |
| 3,2 | 1000 | 9805-1032 |