

MIG 19/13S

Classification

ISO 14343-A : G Z 19 13 Si N L

Description & Applications

Low carbon solid wire for GMAW of stainless steels with similar chemical composition like alloy X1CrNiSi 18-15-4 (UR® S1). High corrosion resistance in nitric acid environment.

Main applications: Storage of nitric acid.

Typical Chemical Composition (%)

| | С | Si | Mn | Cr | Ni | Мо | Р | S | Co | Ti | В | Ν |
|------|---------------|-----|-----|------|------|------|-------|-------|-------|-------|-------|-------|
| Min | | | | | | | | | | | | |
| Max | Not specified | | | | | | | | | | | |
| Type | 0.010 | 4.0 | 1.7 | 18.2 | 12.7 | 0.03 | 0.015 | 0.005 | 0.030 | 0.005 | 0.001 | 0.075 |

All Weld Metal Mechanical Properties

| | R _{p0.2} (MPa) | R _m (MPa) | A ₅ (%) | KV | (J) |
|------|---------------------------|----------------------|--------------------|----|-----|
| Min | - | - | - | - | - |
| Max | - | - | - | - | - |
| Type | 270 | 585 | 40 | - | - |

Welding Current & Instructions

| Welding mode | Wire Ø | Welding p | Shielding Gas | |
|---------------|--------------------------|--|--|--|
| vveiding mode | (mm) | Current (A) | Voltage (V) | Silleluling Gas |
| GMAW = + | 0.8 1.0 1.2 1.6 | 70 - 180 80 - 220 150 - 320 220 - 380 | 18 - 26 18 - 28 22 - 32 24 - 34 | ISO 14175: M12 (Ar+0.5-5%CO ₂) M13 (Ar+0.5-3%O ₂) 15-20 l/min |

Back shielding with Argon or Nitrogen gas or with copper backing support to avoid "back end" rust phenomena.

FT En-MN42-191118