

Cor-A-Rosta 347

Stainless rutile cored wire

Classification

AWS A5.22 : E347T0-4
ISO 17663 : T 19 9 Nb R M 3

General description

Rutile gas shielded stainless steel wire electrode for downhand welding
For Ti or Nb stabilized 304 or equivalent steels
Excellent resistance in oxidizing environments such as nitric acid
High resistance to intergranular corrosion
Easy slag release and smooth bead appearance

Welding positions



ISO/ASME PA/1G PB/2F PC/2G

Current type/Shielding gas

DC +
Ar+ (>5-25%) CO₂ (EN 439: M21)
15-25 l/min

Chemical composition (w%) and Ferrite Number (FN). typical. all weld metal

| Shielding gas | C | Mn | Si | Cr | Ni | Nb | FN |
|---------------|------|-----|------|------|------|-----|----|
| M21 | 0.03 | 1.2 | 0.45 | 19.0 | 10.5 | 0.5 | 8 |

Mechanical properties, typical, all weld metal

| | Shielding gas | Condition | Yield strength (N/mm ²) | Tensile strength (N/mm ²) | Elongation (%) | Impact ISO-V(J) +20°C |
|----------------|------------------------|-----------|-------------------------------------|---------------------------------------|--------------------|-----------------------|
| Required: | AWS A5.22 ISO 17663 | | not required min. 350 | min. 520 min. 550 | min. 30 min. 25 | |
| Typical values | | M21 AW | 440 | 610 | 41 | 85 |

Packaging and available sizes

| Unit | Net weight (kg) | Diameter (mm) |
|--------------------|-----------------|---------------|
| Plastic spool S300 | 15 | X |

Cor-A-Rosta 347: rev. EN 22

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Liability: All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance Fumes: Consult information on Welding Safety Sheet, available upon request

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Materials to be welded

| Steel grades | EN 10088-1/-2 | EN 10213-4 | W.Nr. | ASTM/ACI A240/A312/A351 | UNS | |
|------------------------|-----------------|------------------|----------------|----------------------------|----------|--------|
| Ti-, Nb- stabilized | X6 CrNiTi 18 10 | | 1.4541 | (TP)321 | S32100 | |
| | | | | (TP)321H | S32109 | |
| | X6 CrNiNb 18 10 | | 1.4550 | (TP)347 | S34700 | |
| | | | | (TP)347H | S34709 | |
| Non stabilized | | GX5 CrNiNb 19-10 | 1.4552 | CF-8C | J92710 | |
| | | | | 302 | | |
| | X4CrNi 18-10 | | | 1.4301 | (TP)304 | S30400 |
| | | | | 1.4306 | (TP)304L | S30403 |
| | X2CrNi 19-11 | | GX5 CrNi 19-10 | 1.4308 | CF-8 | J92600 |
| | | | | 1.4312 | (TP)304H | S30409 |

Welding parameters, optimum fill passes in shielding gas M21

| Welding position Diameter (mm) | PA/1G Current (A) | PB/2F | PC/2G |
|-----------------------------------|----------------------|---------|---------|
| 1.2 | 100-250 | 100-250 | 100-200 |