

CATEGORY GTAW Solid wires

TYPE Solid Titanium welding wire Grade 1 (purest grade)

APPLICATIONS CEWELD ERTi-1 Grade 1 is the lowest strength unalloyed (or Commercially Pure-CP) grade. Grade 1 is used in applications where ductility is paramount, such as explosive cladding, loose linings, expanded metal, and deep drawing applications. It is also used in electrolytic applications like coated anode substrates for production of chlorine and sodium chlorate.

PROPERTIES The weld deposit is ductile and offers excellent corrosion resistance in oxidizing environments. The purity and corrosion resistance makes the alloy a preferred choice in many applications to prevent or solve problems. The wire is cleaned in a very special way to obtain porosity free and a ductile weld deposits.

CLASSIFICATION

| | |
|--------|---------------------------|
| AWS | A 5.16: ERTi-1 |
| EN ISO | 24034: S Ti 0100 / Ti99,8 |
| F-nr | 51 |

SUITABLE FOR ER Ti-1 is the purest grade and is suitable for welding Titanium grade 1, 2, 3 and 4. With the restriction that the mechanical properties are much less than Grade 2, 3 and 4. The weld deposit is ductile and offers excellent corrosion resistance in oxidizing environments. This alloy finds his applications in chemical industry and offers excellent Weldability.

APPROVALS No Approvals Found

WELDING POSITIONS:



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

| C | H | N | O | Fe |
|------|-------|------|------|------|
| 0.02 | 0.003 | 0.01 | 0.03 | 0.02 |

ALL WELD MECHANICAL PROPERTIES

| Heat Treatment | R _{p0,2} MPa | R _m MPa | A5 (%) |
|----------------|--------------------------|-----------------------|-----------|
| As Welded / | 250 | 320 | 24 |

WELDING PARAMETERS / PACKING

| WELDING PARAMETERS | WELDING PARAMETERS | WELDING PARAMETERS | PACKING |
|--------------------|--------------------|--------------------|-----------|
| D (MM) | LENGTH (MM) | CURRENT (A) | KG / TUBE |
| 1.2 | 1000 | | 2.5 |
| 1.6 | 1000 | | 2.5 |
| 2.0 | 1000 | | 2.5 |
| 2.4 | 1000 | | 2.5 |

REDRYING TEMPERATURE Not required

GAS ACCORDING EN 14175 I1