# CEWELD ER 90 S-G (P92) Tig

certilas® THE FILLER METAL SPECIALIST

**TYPE**

Medium alloyed, high-strength creep resistant 9% Cromium alloy.

**APPLICATIONS**

TIG/GTAW wire for high temperature, creep resistant, modified 9%Cr1%Mo martensitic steel (T92/P92). Alloy T92/P92 is widely used in the power generating industry for fossil fuel ultra-super-critical (USC) power plant boilers and turbines; the alloy is also finding applications in the chemical and oil and gas industries.

**PROPRIÉTÉS**

T92/P92 steel is commonly used at service temperatures up to 620°C. V, Nb and N additions provide this 'creep strength enhanced ferritic' (CSEF) alloy with improved high temperature creep resistance compared to standard CrMo creep resistant alloys.

**CLASSIFICATION**

| | |
|---|---|
| AWS | A 5.28: ER 90S-G |
| EN ISO | 21952-A: W ZCrMoWVNb 9 0,5 1,5 |
| F-nr | 6 |
| FM | 3 |

**CONVIENT POUR**

For matching P92, 9%Cr1.7%W0.5%Mo, creep resisting martensitic steels.
X10CrWMoVNb 9 2
ASTM: A182 grade F92, A213 grade T92, A335 grade P92, A387 grade 92

**AGRÉMENTS**

CE

**POSITIONS DE SOUDAGE**


**TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)**

| C | Si | Mn | P | S | Cr | Ni | Mo | W | Nb |
|---|---|---|---|---|---|---|---|---|---|
| 0.1 | 0.35 | 0.5 | 0.008 | 0.008 | 9.1 | 0.5 | 0.8 | 1.6 | 0.05 |

**PROPRIÉTÉS MÉCANIQUES**

| Heat Treatment | $R_{P0,2}$ (MPa) | Rm (MPa) | A5 (%) | Hardness |
|---|---|---|---|---|
| 730°C- 760°C 3h | 550 | 630 | 17 | HRc |

**ETUVAGE**

Not required

**GAS ACC. EN ISO 14175**

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