



CEWELD E 9018-B9

TYPE Basic, Cr and Mo-alloyed electrode for heat resistant steels T/P91 and T/P92

APPLICATIONS Headers, main steam piping and turbine casings, in fossil fueled power generating plants. Oil

refineries and coal liquefaction and gasification plants. Preheat and Interpass temperature 200°C -

300°C.

PROPERTIES CEWELD E 9018-B9 is designed to weld equivalent 'type T91' CrMo steels modified with small

additions of niobium and Vanadium to give improved long term creep properties. These

consumables are specifically intended for high integrity structural service at elevated temperature so the minor alloy additions responsible for its creep strength are kept above the minimum

considered necessary to ensure satisfactory performance. In this case, weldments will be weakest in the softened (intercritical) HAZ region of parent material, as indicated by so-called 'type IV' failure

in transverse weld creep tests.

CLASSIFICATION A 5.5: E 9018-B91 **AWS**

> EN ISO 3580-A: E CrMo91 B42 H5

F-nr 4 FΜ 4

SUITABLE FOR 9%Cr, 1%Mo, VNb

1.7389, 1.7386, 1.4922, 1.4935, 1.4904, 1.4903, 1.4955,

X11CrMo9-1, X12CrMo9.1, X20CrMoV10-1, X10CrMoVNb9-1, GX12CrMoVNbN9-1

ASTM Grade 91, T91, P91, F91, FP91, WP91,C12A

STPA28, STBA28

APPROVALS CE

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF WELD METAL

(%)

| С | Si | Mn | Р | S | Cr | Ni | Мо | V | Nb | N |
|------|-----|-----|------|------|----|-----|-----|-----|------|------|
| 0.09 | 0.3 | 0.9 | 0.01 | 0.01 | 9 | 0.6 | 0.9 | 0.2 | 0.06 | 0.04 |

ALL WELD MECHANICAL **PROPERTIES**

| Heat | R _{P0,2} | Rm | A5 | Impact Energy (J) ISO-V |
|-------------|-------------------|-----|-----|-------------------------|
| Treatment | MPa | MPa | (%) | RT |
| As Welded / | 550 | 700 | 21 | 55 |

REDRYING TEMPERATURE 400°C / 1 hr

GAS ACCORDING EN 14175





CEWELD E 9018-B9

| E 9018-B9 2,5 X 300MM | Туре | KG/unit | EANCode | | |
|-----------------------|------|---------|---------------|--|--|
| | Can | 2,5 | 8720663400505 | | |
| | | | | | |
| E 9018-B9 3,2 X 350MM | Туре | KG/unit | EANCode | | |
| | Can | 2,6 | 8720663400536 | | |
| | | | | | |
| E 9018-B9 4,0 X 450MM | Type | KG/unit | EANCode | | |
| | Can | 3,3 | 8720663400567 | | |