



# CEWELD E 9015-B9 (P92)

TYPE

APPLICATIONS

PROPERTIES

CLASSIFICATION

SUITABLE FOR

APPROVALS

WELDING POSITIONS

TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)

MECHANICAL PROPERTIES

REDRYING

GAS ACC. EN ISO 14175

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

CEWELD® E 9015-B9 (P92) is a basic coated electrode for modified 9Cr1Mo steels. The weld metal of type 9Cr-1Mo-NVWNb is characterised by a martensitic microstructure and is suitable for tempered applications. Applications include joint welding of similar heat resistant steels and cast steels in turbine and power plant construction and in the chemical industry.

CEWELD® E 9015-B9 (P92) is designed for welding equivalent T/P92 CrMo steels modified with 1.6% tungsten to achieve the creep properties of the base metal. Our electrode is intended for use in structures requiring high resistance at elevated temperatures.

AWS

EN ISO

W.Nr.

F-nr

FM

A 5.5: E 9015-B92

3580-A: E Z CrMoWVNb9 0,5 2 B 4 2 H5

1.4901

4

4

9%Cr,1.7%,W0.5%,Mo, P92,


1.4901, 1.4922


X10CrWMoVNB 9 2, X20CrMoV12-1,


ASTM: A182 grade F92, A213 grade T92, A335 grade P92, A387 grade 92, A335 grade T92


NF 616


CE


PA

PB

PC

PD

PE

PF

|     |     |     |     |     |     |     |      |      |     |
|-----|-----|-----|-----|-----|-----|-----|------|------|-----|
| C   | Si  | Mn  | Cr  | Ni  | Mo  | V   | Nb   | N    | W   |
| 0.1 | 0.2 | 0.6 | 8.5 | 0.5 | 0.5 | 0.2 | 0.05 | 0.04 | 1.7 |

| Heat Treatment | R <sub>P0,2</sub><br>(MPa) | R <sub>m</sub><br>(MPa) | A <sub>5</sub><br>(%) | Impact Energy (J) ISO-V |  | Hardness |
|----------------|----------------------------|-------------------------|-----------------------|-------------------------|--|----------|
|                |                            |                         |                       | RT                      |  |          |
| 760°C±15°C 2h  | 600                        | 750                     | 18                    | 50                      |  | HRc      |

400°C / 1 hr