

CEWELD E 9016-B9

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/P91 and T/P92

Headers, main steam piping and turbine casings, in fossil fuelled power generating plants. Oil refineries and coal liquefaction and gasification plants. Preheat and Interpas temperature 200°C - 300°C.

CEWELD® E 9016-B9 is designed to weld equivalent 'type T91' T92 CrMo steels modified with small additions of Tungsten 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.

AWS
EN ISO
F-nr
FM

A 5.5: E9016-B91
3580-A: E CrMo91
4
4

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

CE

PA

PB

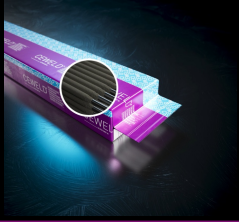
PC

PF

C	Si	Mn	P	S	Cr	Ni	Mo	Nb	V	N
0.1	0.3	0.9	0.008	0.008	9	0.5	1	0.08	0.2	0.03

Heat Treatment	R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness
				RT		
As Welded	550	680	18	60		HRc

400°C / 1 hr



CEWELD E 9016-B9

E 9016-B9 3,2 X 350MM

Packaging	KG/unit	EanCode
VAC pack	1,9	8720663401465