CEWELD E 9018-B9

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

APPLICATIONS

CEWELD E 9018-B9 is intended for the welding of equivalent T/P91 type CrMo steels modified with minor additions of niobium and vanadium to obtain improved creep rupture properties. These welding consumables are specifically designed for use in high strength structures at elevated temperatures so that the low alloy additions responsible for creep rupture strength are kept above the minimum required for satisfactory performance.
Suitable for: Headers, main steam pipes and turbine casings in fossil fuel power stations. Oil refineries, coal liquefaction and gasification plants. Preheat and interpass temperature 200°C - 300°C.

PROPERTIES

CEWELD E 9018-B9 is modified with minor additions of niobium and vanadium to achieve improved creep rupture properties. It is specifically designed for use in high strength structures at elevated temperatures so that the low alloy additions responsible for creep rupture strength can meet the strength requirements. In this case the welds are weakest in the area of the softened (intercritical) HAZ of the base material.

CLASSIFICATION

AWS	A 5.5: E 9018-B91
EN ISO	3580-A: E CrMo91 B42 H5
F-nr	4
FM	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

PA   PB   PC   PD   PE   PF

TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)

C	Si	Mn	P	S	Cr	Ni	Mo	V	Nb	N
0.09	0.3	0.9	0.01	0.01	9	0.6	0.9	0.2	0.06	0.04

MECHANICAL PROPERTIES

Heat Treatment	$R_{P0,2}$ (MPa)	Rm (MPa)	A5 (%)	Impact Energy (J) ISO-V	Hardness
				RT	
As Welded	550	700	21	55	HRc

REDRYING   400°C / 1 hr

GAS ACC. EN ISO 14175

E 9018-B9 2,5 X 300MM

Packaging	KG/unit	EanCode
Can	2,5	8720663400505

E 9018-B9 3,2 X 350MM

Packaging	KG/unit	EanCode
Can	2,6	8720663400536

E 9018-B9 4,0 X 450MM

Packaging	KG/unit	EanCode
Can	3,3	8720663400567