



# CEWELD E 9015-B9

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

**APPLICATIONS** CEWELD® E 9015-B9 is a basic stick electrode for modified 9Cr1Mo steels. The weld metal of type 9Cr-1Mo-VNb is characterized by a martensitic microstructure and is suitable for applications in the tempered condition. The range of applications includes joint welding of similar heat-resistant steels and cast steel in turbine and power plant construction as well as in the chemical industry.

**PROPERTIES** The weld metal of CEWELD® E 9015-B9 has a very low hydrogen content and is suitable for application temperatures up to max. 650° C in the long-term range. Preheating and interpass temperature 250 - 350° C, then tempering 750° C / >2h. It can be welded in a short arc in all positions, vertical down.

**CLASSIFICATION**

AWS	A 5.5: E9015-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**

**TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)**

C	Si	Mn	P	S	Cr	Ni	Mo	V	Nb	N
0.1	0.3	0.8	0.008	0.008	9	0.65	0.99	0.2	0.05	0.05

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>P0,2</sub> (MPa)	R <sub>m</sub> (MPa)	A <sub>5</sub> (%)	Impact Energy (J) ISO-V		Hardness
				RT		
760°C±15°C 2h	560	750	18	60		HRc

**REDRYING** 300°C / 2 hr

**GAS ACC.** EN ISO 14175