



CEWELD E 9015-B9

TYPE	Basic, Cr and Mo-alloyed electrode for heat resistant steels T/P91 and T/P92										
TOEPASSINGEN	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.										
EIGENSCHAPPEN	9015-B9 is designed to weld equivalent 'type T91' T92 CrMo steels modified with small additions of vanadium and tungsten 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.										
CLASSIFICATIE	AWS	A 5.5: E9015-B91									
	EN ISO	3580-A: E CrMo91 B42 H5									
	F-nr	4									
	FM	4									
GESCHIKT VOOR	P91: 9%Cr-1% Mo ISO 15608: ~5,4 C ≤ 0,35 %, 7,0 % ≤ Cr < 10,0 % und 0,7 < Mo ≤ 1,2 % 1.7386, 1.7688, 1.7389, 1.4903, 1.4955 X12CrMo 9 1, GX12CrMo 10 1, X11CrMo9-1, X7CrMo9-1, X10CrMoVNb9-1, GX12CrMoVNbN9-1 ASTM: Grade 91, T91, P91, F91, FP91, A182/A336 grade F91, A213 grade T91, A217 grade C12A, A234 grade WP91, A387 grade 91, A335 grade P91 STPA28, STBA28										
GOEDKEURINGEN	CE										
LASPOSITIES	 PA  PB  PC  PF  PD  PE										
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
MECHANISCHE WAARDEN	Heat Treatment		R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V				Hardness	
	760°C±15°C 2h		560	750	18	RT				HRc	
HERDROGEN	300°C / 2 hr										
GAS ACC. EN ISO 14175											