





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  $200^{\circ}\text{C}$  -

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 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

GOEDKEURINGEN CE

LASPOSITIES



TYPICAL CHEMICAL ANALYSIS OF WELD METAL

(%)

										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	R <sub>P0,2</sub> (MPa)	Rm (MPa)	A5 (%)	Impact Energy (J) ISO-V	
Treatment				RT	Hardness
760°C±15°C 2h	560	750	18	60	HRc

HERDROGEN 300°C / 2 hr

GAS ACC. EN ISO 14175