

CEWELD ER 90S-B9 (P91) Tig



TYPE Medium alloyed, high-strength creep resistant 9% Cromium alloy.

APPLICATIONS Designed for welding equivalent type 91~9% Cr Steels modified with small aditions of Niobium,

> Vanadium and Nitrogen to offer improved long term creep properties. This alloy is specialy intended for high integrity structural service at elevated temperature such as: Headers, main steam piping

and turbine casings, gasification plants etc.

PROPERTIES Filler metal specifically intended for high integrity structural service at elevated temperature so the

minor alloy additions responsible for its creep strenghth are kept above the minimum considered

necessary to ensure satifactory performance.

CLASSIFICATION **AWS** A 5.28: ER 90S-B9

EN ISO 21952-A: W CrMo91

F-nr FΜ 3 W.Nr. 1.4903

SUITABLE FOR For matching P91, 9%Cr1%Mo modified, creep resisting martensitic steels

A 213 T91, A335 P91, A387 Gr91, A 182/A336 F91, X10CrMoVNb9-1, 1503 Gr91, AFNOR NF A-

49213/A-49219 Gr TU Z 10, CDVNb 09-01

APPROVALS CE

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

ALL WELD MECHANICAL

PROPERTIES

С	Si	Mn	Cr	Ni	Мо	V	Other
0.1	0.32	0.52	9.15	0.65	0.95	0.22	0.04

 $\mathsf{R}_{\mathsf{P0,2}}$ Rm Α5 Impact Energy (J) ISO-V Heat Treatment MPa MPa (%) RT 730°C-760°C/3h 520 750 19 200

REDRYING TEMPERATURE Not required

GAS ACCORDING EN 14175