

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-B91

EN ISO 21952-A: W CrMo91

W.Nr. 1.4903 F-nr 6 FM 3

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 (%)

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

MECHANICAL PROPERTIES

Heat	R _{P0,2} (MPa)	Rm (MPa)	A5 (%)	Impact Energy (J) ISO-V]
Treatment				RT	Hardness
730°C- 760°C 3h	520	750	19	200	HRc

REDRYING Not required

GAS ACC. EN ISO 14175 I1