CEWELD ER 90S-B9 (P91) Tig

certilas® THE FILLER METAL SPECIALIST

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 (%)

C	Si	Mn	Cr	Ni	Mo	V	Other
0.1	0.32	0.52	9.15	0.65	0.95	0.22	0.04

MECHANICAL PROPERTIES

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

REDRYING

Not required

GAS ACC. EN ISO 14175

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