



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 additions of Niobium, Vanadium and Nitrogen to offer improved long term creep properties. This alloy is specially 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 strength are kept above the minimum considered necessary to ensure satisfactory 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)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness	
	730°C- 760°C 3h	520	750	19	RT		HRc	
REDRYING	Not required							
GAS ACC. EN ISO 14175	I1							