



CEWELD ER 90 S-G (P92)

TYPE Medium-alloyed Copper- coated Solid wire for high-strength, creep-resistant 9% chromium alloy. (G Z CrMoWVNb 9 0.5 1.5 / ER90S-B92)

APPLICATIONS CEWELD® ER 90 S-G (P92) is a high-temperature, creep-resistant, modified martensitic wire of type G Z CrMoWVNb 9 0.5 1.5 / ER90S-B92. The alloy T92/P92 is often used in the power generation industry for ultra-supercritical fossil fuel-fired power plant boilers and turbines; the alloy is also used in the chemical, oil and gas industries.

PROPERTIES CEWELD® ER 90 S-G (P92) is commonly used at operating temperatures of up to 620°C. V, Nb and N additions give this "creep improved ferritic" (CSEF) alloy improved high temperature creep resistance compared to standard creep resistant CrMo alloys. Due to the controlled Mn+Ni content, the A C1 temperature is safely above 780°C.

CLASSIFICATION

AWS	A 5.28: ER 90S-G
EN ISO	21952-A: G ZCrMoWVNb9 0,5 1,5
F-nr	6
FM	4

SUITABLE FOR **P92, 9%Cr1.7%W0.5%Mo,**
1.4901
X10CrWMoVNb 9 2
ASTM A213 Gr. T 92; A355 Gr. P92; A187 F92, A369 FP92; A1017 Gr 92
KA-STBA29; KA-STPA29 NF 616

APPROVALS CE

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

C	Si	Mn	P	S	Cr	Ni	Mo	V	W
0.1	0.4	0.45	0.008	0.008	8.8	0.5	0.4	0.2	1.6

MECHANICAL PROPERTIES

Heat Treatment	R _{P0.2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V	Hardness
				RT	
730°C- 760°C 2h	690	800	19	110	HRc

REDRYING Not required

TYPICAL QUALITY VALUES AT 600°C TS = 455 MPa YS = 390 MPa E = 19 %

GAS ACC. EN ISO 14175 M21



CEWELD ER 90 S-G (P92)

ER 90 S-G (P92) 1,2MM

Packaging	KG/unit	EanCode
BS-300	15	8720663416872