



# CEWELD ER 90S-B3

**TYPE** Copper- coated welding wire for welding creep- and hydrogen-resistant steels. P21 and P22 steels (CrMo2Si, B3Si).

**APPLICATIONS** CEWELD® ER 90S-B3 exhibits a bainitic microstructure in the tempered and tempered condition. It is used for processing high-temperature steels in High pressure boiler steels, offshore, repair, construction, pipelines, tubing etc

**PROPERTIES** CEWELD® ER 90S-B3 has an extremely easy-to-weld wire with excellent welding properties. It typically contains 2.25 % chromium and 1.0 % molybdenum.  
Weldable with Co2 and mixed gas. Suitable for heat-resistant applications at working temperatures up to 600 °C. The filler metal has low levels of tramp elements (eg. Sn, As, Sb and P) providing a low Bruscasto Factor.(X<10 ppm)for temper embrittlement resistant applications.

**CLASSIFICATION**

AWS	A 5.28: ER 90S-B3
EN ISO	21952-B: G 62 M 2C1M2 (CrMo2Si)
F-nr	6
FM	3

**SUITABLE FOR** **2,25% Cr, 1% Mo ISO 15608: ~5,2 (1,5 % < Cr < 3,5 % und 0,7%<Mo < 1,2%)**  
1.7015, 1.7131, 1.7147, 1.7276, 1.7281,1.7380, 1.7337, 1.7262, 1.7258, 1.7350, 1.7357, 1.7375, 1.7379, 1.7380, 1.7383, 1.7385, 1.7707, 1.8075  
10CrMo9-10, 10CrMo11, 12CrMo9-10, 10CrSiMoV7, 12CrSiMo8, 30CrMoV9, GS-18CrMo9.10, 15CrMoV5-10, 16CrMo4-4, 15CrMo5, 24CrMo5, 22CrMo4-4, GS-17CrMo5-5, 15Cr3, 16MnCr5, 20MnCr5, 10CrSiV7,

ASTM: A 387 Gr. 22, A217 Grade WC9, A335 Gr. P22, A217 Gr. WC9, A182 F22, A182 T22, A1031 Gr.5015, A1031 Gr.5115, A1031 Gr.4820

**APPROVALS** No Approvals Found

**WELDING POSITIONS**



**TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)**

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Other
0.1	0.5	0.55	0.005	0.009	2.45	0.03	0.1	0.025	0.03

**ALL WELD MECHANICAL PROPERTIES**

Heat Treatment	R <sub>P0,2</sub> MPa	R <sub>m</sub> MPa	A <sub>5</sub> (%)	Impact Energy (J) ISO-V
690°C±15°C /2h	550	630	18	RT 100

**REDRYING TEMPERATURE** Not required

**GAS ACCORDING EN 14175** M21



# CEWELD ER 90S-B3

ER 90S-B3 0,9MM

Type	KG/unit	EANCode
D-200	15	8720663416742

ER 90S-B3 1,0MM

Type	KG/unit	EANCode
BS-300	15	8720663416766
D-200	15	8720663416773