CEWELD® ER 90S-B3

CATEGORY	GMAW Solid wires
TYPE	Copper coated MIG welding wire for welding creep resistant ferritic steels
APPLICATIONS	MIG filler metal for high temperature creep resistant 2.25%Cr-1%Mo ferritic steel. These steels are used for creep resisting applications up to ~600°C. Typical applications in power generation plant include steam piping, turbines and boilers; the alloy also finds applications in the chemical and petro-chemical industries.
PROPERTIES	The filler metal has low levels of tramp elements (eg. Sn, As, Sb and P) providing a low Bruscato 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	For matching 2.5%Cr1%Mo creep resisting ferritic steels EN: 10CrMo9-10, 12CrMo9-10, 10CrSiMoV7, 12CrSiMo8, 30CrMoV9, GS-18CrMo9-10 ASTM: A182 F22, A199/A200 grades T21/T22, A213 T22, A217 WC9, A234 WP22, A335 P22, A387 grades 21/22
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	$R_{P0,2}$ MPa	Rm MPa	A5 (%)	Impact Energy (J) ISO-V RT
690°C±15°C /2h	550	630	18	100

WELDING PARAMETERS / PACKING

WELDING PARAMETERS	WELDING PARAMETERS		PACKING	PACKING	PACKING
D (MM)	VOLTAGE (V)	CURRENT DC+ (A)	SPOOL TYPE	KG/SPOOL	KG/PALLET
1,0	18-28	80-280	S/D 300	15	1080

REDRYING TEMPERATURE	Not required
GAS ACCORDING EN 14175	M21