

ER 80S-B2

CATEGORY GMAW-GTAW Solid wires

TYPE Copper coated welding wire for welding creep resistant ferritic steels.

APPLICATIONS Filler metal for high temperature creep resistant 1.25%Cr0.5%Mo ferritic steel. These steels are used for creep resisting applications up to ~550°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 80S-B2
EN ISO 21952-B: G 55 M 1CM

SUITABLE FOR For matching 1.25%Cr0.5%Mo creep resisting ferritic steels. 13CrMo 4-5, 16CrMo 4-4, GS-17CrMo 5-5, ASTM: A182 grades F11/F12, A199/A200 T11, A217 grades WC6/WC11, A234 grades WP11/WP12, A335 grades P11/P12, A387 grades 11/12

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

C	Mn	Si	Cr	Cu	Mo
0.09	0.55	0.55	1.35	<0,20	0.50

MECHANICAL PROPERTIES

Heat Treatment	Rp0,2 (N/mm ²)	Rm (N/mm ²)	4d/5d (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				20°C	-40°C	-60°C	
PWHT 620-690°C	> 470	> 560	> 19				

Preheat 200°C / Interpass temp; max. 300°C

WELDING PARAMETERS / PACKING

Welding Parameters		Packing (kg)	
D (mm)	Current (A) (DC+)	spool type	kg / spool / drum
0.8	60-200	D-200 / K-300 / drum	5 / 15 / 250
1.0	80-300	K-300 / drum	15 / 250
1.2	120-340	K-300 / drum	15 / 250

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: M21