

ER 80S-B8

CATEGORY GMAW-GTAW Solid wires

TYPE Medium alloyed, high-strength 9% Chromium alloy.

APPLICATIONS Low alloyed copper-coated solid wire with 9% Cr and 1% Mo to be used for welding creep resistant steel. It finds applications in power plants, chemical or petro-chemical industry and in the ammonia synthesis process. It is also used for heat exchangers, boilers, piping and pressure vessels for temperature service up to 600°C.

PROPERTIES Corrosion resistance is higher than 5Cr-0.5Mo steels requirements. To be used with shielding gas Ar+O₂.

CLASSIFICATION

AWS	A 5.28: ER 80S-B8
EN ISO	21952-A: WCrMo9
DIN	8575:

SUITABLE FOR ASTM: A 182 Gr F9, A 199 Gr T9 , A 213 Gr T9 , A 217 Gr C12 , A 234 Gr WP9, A 335 Gr 9 , A 336 Gr F9 , A 387 Gr 9 , EN (BS 3100 Gr B6), (BS 3604 Gr CFS 629-470, HFS 629-470), (BS 3604 Gr HFS 629-590, CFS 629-590) , (DIN GS-12CrCrMo 10-1) , (DIN X12CrMo 9-1) , (DIN X7CrMo 9-1) W.Nr: 1.7386, 1.7388, 1.7389

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

C	Mn	Si	S	P	Cr	Mo	Cu
0.07	0.50	0.40	0.008	0.008	9.00	1.0	0.12

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				+20°C	+40°C	+60°C	
SR	560	700	23	60			

SR: stress relieved PWHT 750°C-760°C / 1 Hr (Typical)

WELDING PARAMETERS / PACKING

D (mm)	Welding Parameters		Packing	
	Voltage (V)	Current (A)	spool type	kg / spool
0.8	15-24	60-210	S / D 300	15
1.0	18-28	80-280	S / D 300	15
1.2	20-33	120-350	S / D 300	15

REDRYING TEMPERATURE not required

TIG WELDING 1000 mm. cut lengths are available from 1,6 till 3,2 mm in 5 kg tubes.