

SA 80S-B8

CATEGORY GMAW-GTAW Solid wires

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

APPLICATIONS Low alloyed copper-coated SAW 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 The 9%Cr-1%Mo creep resistant alloy is used for service up to ~600°C particularly in environments involving hot hydrogen gas.

CLASSIFICATION

AWS	A 5.23: EB8
EN ISO	24598-A: S CrMo9
DIN: W.Nr.	-

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	Cr	Ni	Mo
0.08	0.60	0.40	8,70	0,18	1,00

MECHANICAL PROPERTIES (TYPICAL)

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

Welding Parameters			Packing	
D (mm)	Voltage (V)	Current (A) (DC+)	spool type	kg / spool / drum
2,0	26-29	280-375	K-415 / Drum	25 / 300
2,4	27-30	320-420	K-415 / Drum	15 / 300
3,2	27-30	400-520	K-415 / Drum	15 / 300

REDRYING TEMPERATURE not required

RECOMENDED FLUX FL 155