

Mild steel solid wire

Classification

AWS A5.28 :ER80S-B2*
 EN 12070 :W CrMo1Si/G CrMo1Si
 * Nearest classification

General Description

Solid wire for welding creep and hydrogen resistant Cr-Mo steels
Service temperature up to 550°C

Shielding gases (acc. EN 439)

GTAW I1 Inert gas Ar 100%
 GMAW M21 Mixed gas Ar+ >5-25% CO₂
 C1 Active gas 100% CO₂

Approvals

TÜV
 GTAW +
 GMAW +

Chemical composition (w%), typical, all weld metal

C	Mn	Si	Cr	Mo
0.1	1.0	0.5	1.2	0.5

Mechanical properties, all weld metal

	Process	Shielding gas	Condition	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Impact (ISO), J
							+20°C
Typical values after welding	GTAW	I1	SR 700°C/1h	540	640	22	250
	GTAW	M21	AW	480	590	24	125
	GMAW	M21	SR 700°C/1h	530	635	23	160

Materials to be welded

Steel	Code	Type
Elevated temperature steel	EN 10028-2	13 CrMo 4-5
	EN 10083-1	25 CrMo 4
	EN 10222-2	14 CrMo 4-5
Toolsteel	DIN 17210	16 MnCr 5

Application advice

Preheating of welded joints in accordance with EN 1011-1 (200-250°C)
 If necessary, provide stress relieve at 660-700°C

Packaging, available sizes and identification

Process	Unit:	Sizes, mm			
		1.0	1.2	2.0	2.4
GTAW	2 and 5 kg tube			X	X
GMAW	15 kg spool B300	X	X		

Other sizes and packaging on request

Identification

Imprint: Revis®80S-B2

Tip colour:

Revis®80S-B2 : rev.EN 20