

Low alloy solid wire

Classification

AWS A5.28	:ER70S-A1
EN 12070	:W MoSi / G MoSi
EN 1668	:W 46 3 W2Mo
EN 440	:G 46 3 M G2Mo

General Description

Solid wire for welding creep resistant 0.5%Mo steels and fine grained steels for low temperature applications in the as welded condition with service temperatures in range -30°C to +500°C

Shielding gases (acc. EN 439)

GTAW	I1	Inert gas Ar 100%
GMAW	M21	Mixed gas Ar+ >5-25% CO ₂
	C1	Active gas 100% CO ₂

Approvals

	DNV	TÜV
GTAW	NV 0.3 Mo	+
GMAW		+

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

C	Mn	Si	Mo
0.12	1.2	0.6	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	-20°C	-30°C
Typical values after welding	GTAW	I1	AW	550	650	24	170		90
			SR 620°C/1h	520	610	23	190		120
	GMAW	M21	AW	540	640	22	130	90	70
			SR 620°C/1h	500	600	25	120		

Materials to be welded

Steel	Code	Type
Elevated temperature steel	EN 10028-2	P295 G H, P355 G H, 16 Mo 2
	EN 10222-2	17 Mo 3, 14 Mo 6
Fine grained steel	EN 10113-2	S275, S355, S420
	EN 10113-3	S275, S355, S420

Application advice

Preheating of welded joints in accordance with EN 1011-1
If necessary, provide stress relieve at 580-650°C

Packaging, available sizes and identification

Process	Unit:	Sizes, mm					
		1.0	1.2	1.6	2.0	2.4	3.0
GTAW	2 and 5 kg tube			X	X	X	X
GMAW	15 kg spool B300	X	X				

Other sizes and packaging on request

Identification

Imprint: Revis®70S-A1

Tip colour:

Revis®70S-A1: rev.EN 20