

Low alloy solid rod

Classification

AWS A5.28	: ER70S-A1
ISO 21952	: W MoSi
EN 1668	: W 46 3 W2Mo

General description

Solid rod 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. ISO 14175)

I1 Inert gas Ar (100%)

Approvals

DNV	TÜV
For NV 0,3 Mo	+

Chemical composition (w%) typical wire / rod

C	Mn	Si	Mo
0.12	1.2	0.6	0.5

Mechanical properties, typical, all weld metal

	Shielding gas	Condition	Yield strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%) ¹	Impact ISO-V(J)	
						+20°C	-30°C
Typical values	I1	AW	550	650	24	170	90
		SR 620°C/1h	520	610	23	190	120

Materials to be welded

Steel grades	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 welding joint acc. EN 1011-1
Stress relieving 580-650°C if necessary

Packaging and available sizes

Unit type	Diameter (mm)			
	1.6	2.0	2.4	3.0
2 and 5 kg tube	X	X	X	X
Other sizes and packaging on request				

LNT 12: rev. EN 22

Liability: All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request