

Stainless solid wire

Classification

AWS A5.9-93 : ER307*
EN 12072-99 : W 18 8 Mn / G 18 8 Mn

* Nearest classification

General description

Solid wire for welding steel with difficult weldability
Often used as a buffer layer in hardfacing applications

Shielding gases (acc. EN 439)

GTAW	I1	Inert gas Ar (100%)
GMAW	M12	Mixed gas Ar+ >0-5% CO ₂
	M13	Mixed gas Ar+ >0-3% O ₂

Approvals

	TÜV
GTAW	+
GMAW	+

Chemical composition (w%), typical, wire / rod

C	Mn	Si	Cr	Ni
0.08	7.1	0.8	19.2	9

Mechanical properties, typical, all weld metal

	Process	Shielding gas	Condition	0.2% Proof strength	Tensile strength	Elongation	Impact ISO-V(J)	
				(N/mm ²)	(N/mm ²)	(%)	+20°C	-120°C
Typical values	GTAW	I1	AW	400	650	34	100	50
	GMAW	M12	AW	400	630	40	80	50

Materials to be welded

Various steel grades as:

- Armour plate
- Hardenable steels including steels difficult to weld
- Non-magnetic steels
- Work hardening austenitic manganese steels
- Dissimilar joints (CMn-steels to stainless steels)

Packaging

Process	Unit	Sizes (mm)		
		1.0	1.2	2.0
GTAW	2 kg tube			X
GMAW	15 kg spool BS300	X	X	

Other sizes and packaging on request

LNT/LNM 307: rev. EN 15