

Stainless solid wire

Classification

AWS A5.9-93 : ER308H
EN 12072-99 : W 19 9 H / G 19 9 H

General description

Solid wire for welding austenitic CrNi-steels
Especially for high temperature applications (730°C)
Low sensitivity to precipitation of intermetallic phases

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

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

C	Mn	Si	Cr	Ni	Mo
0.05	1.8	0.5	20	10	0.2

Mechanical properties, typical, all weld metal

	Process	Shielding gas	Condition	0.2% Proof strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J) +20°C
Typical values	GTAW	I1	AW	370	600	35	80
	GMAW	M12	AW	370	590	34	

Materials to be welded

Steel grades	EN 10088-1/-2	EN 102 13-4	W.Nr.	ASTM/ACI	UNS
Medium carbon C > 0.03%	X4 CrNi 18-10		1.4301	302 (TP)304	S30400
		GX5 CrNi 19-10	1.4308 1.4948	(TP)304H CF 8	S30409 J92600

Packaging

Process	Unit	Sizes (mm)				
		1.0	1.2	2.0	2.4	3.2
GTAW	2 and 10 kg			X	X	X
GMAW	15 kg spool BS300	X	X			

Other sizes and packaging on request