

Stainless solid wire

Classification

AWS A5.9-93	: ER310
EN 12072-99	: W 25 20 / G 25 20

General description

Solid wire for welding heat resistant Cr- and CrNi-steels (25%Cr-20%Ni)
High resistance to oxidation and scaling up to approx. 1100°C

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
0.1	1.8	0.45	26	21	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	360	600	35	100
	GMAW	M12	AW	355	610	35	110

Materials to be welded

Steel grades	EN 10088-1/-2	EN 102 13-4	W.Nr.	ASTM/ACI	UNS
X10 CrAl24			1.4762		
			1.4825		
			1.4826		
X15 CrNiSi20-12			1.4828		
			1.4832		
X15 CrNiSi25-20			1.4841	310S CK20	S31008 J94202
			1.4845		
X12 CrNi25-21			1.4845	HK40	
			1.4848		

Packaging

Process	Unit	Sizes (mm)							
		0.8	1.0	1.2	1.6	2.0	2.4	3.2	
GTAW	2 and 10 kg tube					X	X	X	X
GMAW	15 kg spool BS300	X	X	X					

Other sizes and packaging on request