

## Stainless solid wire

### Classification

AWS A5.9-93 : ER309  
EN 12072-99 : G 23 12 L\*

\* Nearest classification

### General description

**Solid GMAW wire for high temperature applications like industrial furnaces**  
High resistance to oxidation up to 1050°C

### Shielding gases (acc. EN 439)

GMAW M12 Mixed gas Ar+ >0-5% CO<sub>2</sub>  
M13 Mixed gas Ar+ >0-3% O<sub>2</sub>

### Approvals

### Chemical composition (w%), typical, wire

C	Mn	Si	Cr	Ni	Mo
0.05	1.8	0.5	24.0	13.5	0.2

### Mechanical properties, typical, all weld metal

	Process	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J) +20°C
Typical values	GMAW	M12	AW	400	640	35	110

### Materials to be welded

Steel grades	EN 10088-1/-2	EN 102 13-4	W.Nr.	ASTM/ACI	UNS
		GX30 CrSi6	1.4710		
	X10 CrAl7		1.4713	502	
	X10 CrAl13		1.4724	410/414-TP405-CA15	
		GX40 CrSi13	1.4729		
		GX40 CrSi17	1.4740		
	X10 CrAl18		1.4742	430-TP430-CB30	
	X10 CrAl24		1.4762	TP443	
		GX25 CrNiSi18-9	1.4825		J92502
		GX40 CrNiSi22-9			
	X15 CrNiSi20-12		1.4828	TP309	S30900
		GX25 CrNiSi20-14	1.4832		
	X12 CrNiTi18-9				

### Packaging

Process	Unit	Sizes (mm)	
		1.0	1.2
GMAW	15 kg spool BS300	X	X

Other sizes and packaging on request