Technical data sheet 011121MBA	Cored welding wire # TUBE S 309HT-S	Welding Alloys

CLASSIFICATION

EN ISO 17633-A T Z 22 10 N H M NO 3
Equivalent Material number 1.4893

DESCRIPTION

- Cored stainless steel wire for submerged arc welding
- Iron based 22% Cr - 10% Ni alloy with controlled additions of C, Si, N and Cerium
- Excellent resistance to oxidation.
- Attractive bead appearance without residual slag, outstanding slag release
- Mineral additions to the core improve mechanical strength and welding characteristics
- Welding under a flux blanket eliminates the emission of toxic fumes, particularly hexavalent chromium

APPLICATIONS

TUBE S 309HT-S weld metal has excellent properties at temperatures up to 1150°C. The controlled carbon and ferrite levels improve microstructural stability and high temperature strength compared to the 309(L) types whereas the lower nickel content provides better resistance against sulphur attack than the 310 grade.

Examples of alloys to be welded

Designation	UNS	Material number	EN Symbol
309	S30900	1.4828	X15 CrNiSi 20-12
AVESTA 153MA	S30415	1.4891	X4 CrNiSiN 18 10
AVESTA 253MA	S30815	1.4893	X8 CrNiSiN 21 11

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Ce	Bi	N	S	P
0.08	0.80	1.50	22.0	10.0	0.05	< 0.002	0.15	0.008	0.020

Typical ferrite level: 8 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A_5 [%]	CVN [J]
550	320	30	+20°C: 47

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2%[MPa]	A_5 [%]	CVN [J]
720	520	35	+20°C: 100

FLUX DESCRIPTION

	WA FLUX 325	WA FLUX 385	WA FLUX 415	WA ULTRAFLUX
EN ISO 14174 class	S A AB 1 65	S A AF 2 64	S A FB 1 55	S A FB 1 55

PACKAGING

Diameter	2.0 mm - 3.2 mm
Standard packaging	EN ISO 544 - ASME IIC SFA-5.2 M
	Coil: B450
Weight	25 kg

Other packaging and other diameters: please consult us