Technical data sheet 011121MBA	Cored welding wire # TUBE S 21 16 5N-G	Welding Alloys

CLASSIFICATION

EN ISO 17633-A: T Z 21 16 5 Mn N M M12 1

DESCRIPTION

- Metal cored stainless steel wire for gas shielded arc welding
- 21% chromium - 16% nickel - 3% molybdenum - high manganese - nitrogen bearing fully austenitic deposit
- Controlled analysis for optimum resistance against solidification cracking and micro-fissuring
- Enhanced productivity, improved weldability, better wetting properties compared to solid wires
- Excellent weld metal quality and X-ray soundness

APPLICATIONS

TUBE S 21 16 5N-G is suitable for welding corrosion resistant stainless steels where ferrite-free and non-magnetic weld metal is required. Excellent resistance to pitting, crevice corrosion and stress corrosion cracking.

Examples:

Material number	EN Symbol
1.3948	X4 CrNiMnMoN 19 13 8
1.3951	X2 CrNiMoN 22 15
1.3952	X2 CrNiMoN 18 14
1.3953	X2 CrNiMnMoNNb 21 16 5 3
1.3964	X4 CrNiMoN 19 16 5

APPROVALS

BWB

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	N	S	P
0.03	6.00	0.50	21.0	15.0	3.00	0.28	0.008	0.020

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A_5 [%]	KCV [J]
640	430	25	+20°C: 70

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2%[MPa]	A_5 [%]	KCV [J]
780	530	35	+20°C: 80

SHIELDING GAS

EN ISO 14175:	M12	Ar + 0.5 % < CO_2 ≤ 2.5 with or without Helium
	Z	Ar + CO_2 ≤ 0.5 % or O_2 ≤ 0.5 % with or without Helium

OPERATING CONDITIONS

Current type	Gas flow rate	Stick out	Recovery
DC (+) / pulsed	10 - 20 l/min.	12 - 25 mm	98 %

WELDING POSITIONS

TUBE S 21 16 5N-G is primarily used in the flat and horizontal-vertical positions. However, welds in other positions are also possible using the short-circuiting or pulsed arc modes of transfer.

PACKAGING

Diameter	1.2 mm	
	EN ISO 544 – ASME II C SFA-5.2 M	
Spool type	S200	BS300
Weight	5 kg	15 kg

Other packaging: please consult us