

Technical data sheet

EN140623GB

Cored welding wire**TUBE S 20 9 3-G****CLASSIFICATION**

ASME IIC SFA 5.9 / AWS A 5.9: (EC308Mo)*
 EN ISO 17633-A: T 20 10 3 M M12 1
 EN ISO 17633-B: TS308Mo-MG0*
 *Mo may exceed 3.0 % and Cr may exceed 21.0 %
 ASME IX Qualification QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- Metal cored stainless steel wire for gas shielded arc welding
- 20% chromium - 9% nickel - 3% molybdenum deposit
- Enhanced productivity, improved weldability, better wetting properties compared to solid wires
- Excellent weld metal quality and X-ray soundness

APPLICATIONS

- Welding stainless steels of similar composition or ferritic stainless steels
- Joining stainless steels to mild and low-alloyed steels
- Buffer layers before hardfacing
- Maintenance on « hard-to-weld steels »
- Welding high carbon hardenable steels, of known or unknown composition and generally most of steels subject to cracking such as tool steels, manganese steels, spring steels and high-speed steels

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	S	P
0.05	1.5	0.8	20.5	9.7	3.2	0.008	0.020

Typical ferrite level: 20 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
620	400	30	+ 20°C: 32

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
780	600	35	+ 20°C: 60

SHIELDING GAS

EN ISO 14175: M12 Ar + 0.5 % < CO₂ ≤ 2.5 %, with or without Helium
 Z Ar + CO₂ ≤ 0.5 % or O₂ ≤ 0.5 %, with or without Helium
 I1 Ar
 M13 Ar + 0.5 % < O₂ ≤ 3.0 with or without Helium

OPERATING CONDITIONS

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick out [mm]	Gas flow rate [l/min]
1.2	DC (+)	95 - 270	16 - 31	12 - 25	10 - 20

Recovery of 98 %

WELDING POSITIONS

EN ISO 6947: PA, PB
 ASME IX: 1G, 1F, 2F

Tube S 20 9 3-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		1.6 mm
	EN ISO 544 – ASME II C SFA-5.2 M		
Spool type	S200	BS300	BS300
Weight	5 kg	15 kg	15 kg

Other packaging: please consult us

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