# Technical data sheet

## Cored welding wire

TETRA V 309H-G



011121MBA

**CLASSIFICATION** 

ASME IIC SFA 5.22 / AWS A 5.22: E309T1-4 - E309T1-1

EN ISO 17633-A: T 22 12 H P M21 1 - T 22 12 H P C1 1 EN ISO 17633-B: TS309-F M21 1 - TS309-F C1 1

Equivalent Material number: 1.4833

ASME IX Qualification QW432 F-N° 6 QW442 A-N° 8

### **DESCRIPTION**

- Rutile flux cored stainless steel wire for gas shielded arc welding
- 24% chromium 13% nickel high carbon deposit
- Attractive bead appearance, very good penetration and high productivity
- Excellent X-ray soundness
- · Specifically designed for out-of-position welding
- · Maximum productivity for completion of vertical welds
- Welded with classical economic Ar-CO<sub>2</sub> mixtures or CO<sub>2</sub>

#### **APPLICATIONS**

TETRA V 309H-G is suitable for welding similar heat resisting alloys in wrought or cast form, for welding dissimilar metals or for joining steels which are difficult to weld, such as ferritic and martensitic 13% Cr steels.

#### Examples:

AIOL	LINO	Matarial secondo en	EN Ol.
AISI	UNS	Material number	EN Symbol
309	S30900	1.4828	X15 CrNiSi 20-12
-	J92602	1.4825	GX25 CrNiSi 18-9
-	J92603	1.4826	GX40 CrNiSi 22-9
-	-	1.4832	GX25 CrNiSi 20-14
-	-	1.4742	X10 CrAl 18
-	S30415	1.4891	X4 CrNiSiN 18 10
-	S30815	1.4893	X8 CrNiSiN 21 11

TYPICAL ALL-WELD METAL ANALYSIS								
	С	Mn	Si	Cr	Ni	Bi	S	Р
	0.06	1.40	0.80	23.0	12.8	< 0.002	0.008	0.020

Typical ferrite level: 8 FN

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES				
Rm [MPa]	Rp0.2% [MPa]	<b>A</b> 5 [%]	CVN[J]	
550	350	25	+ 20°C: 40	
TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES				
Rm [MPa]	Rp0.2%[MPa]	<b>A</b> 5 [%]	CAN [1]	
600	495	33	+ 20°C: 50	

## **SHIELDING GAS**

M21 (Ar + 15 - 25% CO<sub>2</sub>), M20 (Ar + 5%< CO<sub>2</sub> ≤ 15%) gas mixtures or C1 (CO<sub>2</sub>) according to EN ISO 14175/

## **OPERATING CONDITIONS**

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick-out [mm]	Gas flow rate
1.2	DC+	100 - 250	23 - 32	12 - 25	10 - 20 l/min.

## **WELDING POSITIONS**

All positions

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

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.