



# **VERTI-COR 316LT** PRODUCT DATA SHEET

# VERTI-COR STAINLESS STEEL FLUX CORED WIRES; 316LT-ALL POSITIONAL CAPABILITIES



## VERTI-COR 316LT

- Vacuum Sealed in Aluminised Plastic Packs.
- High Deposition Rate Welding of Stainless Steels.
- Formulated for  $\rm CO_2$  or Argon + 18-25%  $\rm CO_2$  Shielding gases.

## **CLASSIFICATIONS:**

AWS/ASME-SFA A5.22:

E316LT1-1 (CO2) / E316LT1-4 (Ar + 18-25%CO<sub>2</sub>).

#### **RECOMMENDED SHIELDING GAS:**

AS 4882:	ISO 14175 / AWS A5.32:
SG-C	C1
SG-AC-18, or SG-AC-20	M21
Welding grade $CO_2$ or Ar+CO <sub>2</sub> (18-25%)	

## TYPICAL ALL WELD METAL MECHANICAL PROPERTIES:

	USING CO <sub>2</sub> : ARGON + 18-25% CO <sub>2</sub>	
0.2% Proof Stress	400 MPa	410 MPa
Tensile Strength	555 MPa	580 MPa
Elongation	<b>42</b> %	<b>39</b> %

## TYPICAL ALL WELD METAL ANALYSIS:

USING WELDING GRADE CO <sub>2</sub> :			
C:	0.03%	Ni	<b>12.0</b> %
Mn:	<b>1.10</b> %	Mo:	2.5%
Si:	0.60%	Р:	0.024%
Cr:	<b>18.8</b> %	S:	0.002%





CIGWELD Data Sheet VERTI-COR 316LT V1-2023 CIGWELD Pty Ltd An ESAB Brand. www.cigweld.com.au

#### **DESCRIPTION AND APPLICATIONS:**

Verti-Cor 316LT is a gas shielded stainless steel flux cored wire developed for positional welding applications on matching Molybdenum bearing 316 and 316L stainless steels. Verti-Cor 316LT is also suitable for the general purpose welding of other "300 series" austenitic stainless steels including 301, 302, 304 and 304L types.

The rutile type flux core gives smooth arc transfer characteristics and very low spatter levels with both  $\rm CO_2$  and Argon + 18-25%  $\rm CO_2$  shielding gases The fast freezing slag gives excellent weld pool control resulting in smooth mitre to slightly convex fillet welds in the flat, horizontal-vertical, vertical-up and overhead welding positions.

Actual weld metal mechanical properties achieved with Verti-Cor wires are influenced by many factors including base metal analysis/heat input used, shielding gas selection, number of weld passes and run placement etc.Please contact CIGWELD for welding procedure recommendations.

# **COMPARABLE CIGWELD PRODUCTS:**

Autocraft 316LSi GMAW Wire	AWS A5.9: ER316LSi
Comweld 316L GAS/TIG rod	AWS A5.9: ER316L
Satincrome 316L -17 Electrode	AWS A5.4: E316L -17

#### **PACKAGING DATA:**

WIRE DIAMETER (MM)	TYPE	PACK WEIGHT	PACK PART NO.
1.2	Spool	15kg	722885

#### **OPERATING DATA:**

All welding conditions recommended below are for use with semi-automatic operation, DC electrode positive and welding grade CO<sub>2</sub> shielding gas with a flow rate of 15-20 litres/min.

WIRE DIAMETER (MM)	CURRENT RANGE (AMPS)	VOLTAGE RANGE (Volts)	CTWD	WELDING Position	
1.2	150-250	23-28	15-20		Flat
1.2	150-200	23-28	15-20		HV Fillet
1.2	120-180	22-27	15-20		Vertical up
1.2	140-180	22-27	15-20	Â	Overhead

These machine settings are a guide only. Actual voltage, welding current and CTWD used will depend on machine characteristics, plate thickness, run size, shielding gas and operator technique etc.





