

VERTI-COR 3XP



- ▲ Microalloyed, Rutile Type Flux Cored Wire.
- ▲ Versatile, All Positional Capabilities.
- ▲ Grade 3 Shipping Society Approvals.

Classifications:

AS 2203.1:	ETP-GMp-W503A. CM1 H10. ETP-GCp-W503A. CM1 H10.
AWS/ASME-SFA A5.20:	E71T-1 H8 , E71T-12M H8.

Description and Applications:

Verti-Cor 3XP is a microalloyed rutile type flux cored wire designed for downhand, vertical-up and overhead fillet and butt welding applications.

Formulated to give smooth (low spatter) arc transfer, flat mitre fillet welds and excellent slag lift in all positions (except vertical-down), Verti-Cor 3XP is suitable for welding a wide range of mild and medium strength steels.

For optimum arc performance and weld deposit impact toughness Argon + 20-25% CO₂ or CO₂ shielding gases are recommended.

Typical Weld Metal Mechanical Properties:

Actual weld metal mechanical properties achieved with Verti-Cor 3XP are influenced by many factors including, base metal analysis, welding parameters / heat input used, shielding gas selection, number of weld passes and run placement etc. Please consult your nearest CIGWELD branch for welding procedure recommendations.

APPROVALS*:

Lloyds Register of Shipping	Grade 3S, 3YS H.
American Bureau of Shipping	Grade 3SA, 3YSA H.
Det Norske Veritas	IIYMS H.

*with Argon + 20-25% CO₂ or CO₂ shielding gases

TYPICAL ALL WELD METAL ANALYSIS:

Using Argon + 20-25% CO₂:

C: 0.07%	Mn: 1.16%	Si: 0.52%
Ti: 0.035%	B: 0.008%	

Using CO₂:

C: 0.06%	Mn: 1.05%	Si: 0.42%
Ti: 0.035%	B: 0.007%	

TYPICAL DIFFUSIBLE HYDROGEN LEVELS TO AS3752:

5.0–6.0 mls of hydrogen / 100gms of deposited weld metal *

* - for "as manufactured" product using Argoshield 52 shielding gas.

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES:

Using	Argon + 20-25% CO ₂ :	CO ₂ :
Yield Stress	480 MPa	460 MPa
Tensile Strength	560 MPa	530 MPa
Elongation	28%	30%
CVN,		
Impact Values	110J av @ 0°C.	90J av @ 0°C.
	90J av @ -20°C	75J av @ -20°C

RECOMMENDED SHIELDING GASES:









- Argon + 20-25% CO₂ or equivalent ISO14175:
M21, M24, M21 (1)
- Welding Grade CO₂ ISO14175: C1

Packaging Data:

Wire Diameter (mm)	Type	Pack Weight	Pack Part No.
1.2	Spool	15kg	720919
1.6	Spool	15kg	720921

**Operating Data:**

All welding conditions recommended below are for use with semi-automatic operation, DC electrode positive and Argon + 20-25% CO₂ shielding gas with a flow rate of 15–20 litres/min

Wire Diameter (mm)	Current Range (amps)	Voltage Range (volts)	CTWD	Welding Positions
1.2	250-300	27-31	20-25	 Flat
1.6	350-400	27-31	25-30	 HV Fillet
1.2	230-280	26-30	20-25	 Vertical up
1.6	310-360	26-30	25-30	 Overhead
1.2	170-220	24-28	15-20	
1.6	200-250	24-28	15-20	
1.2	160-210	24-28	15-20	
1.6	190-240	24-28	15-20	

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.