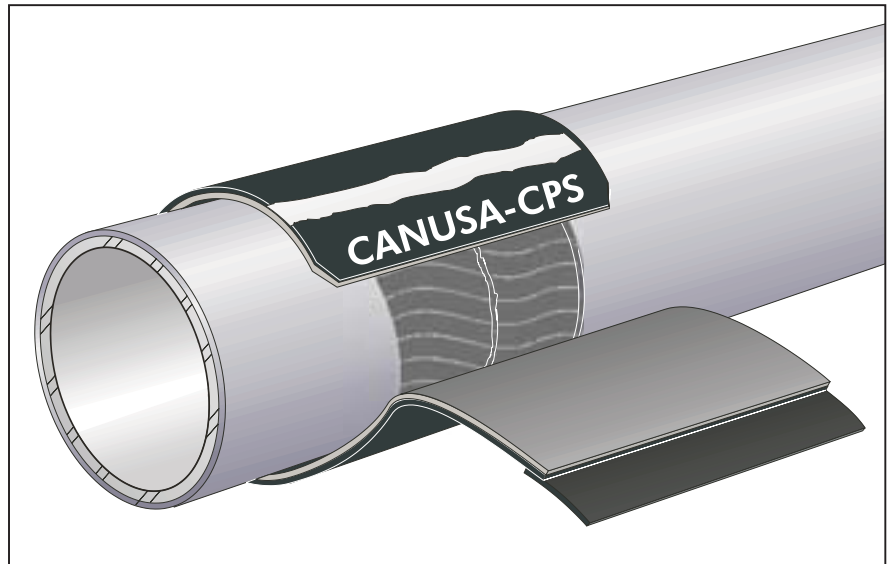




GTS-PP-120 3 Layer

3-Layer crosslinked polypropylene heat shrinkable sleeve system for girth weld protection on high temperature 3-Layer polypropylene, insulated pipelines

Canusa-CPS is a leading manufacturer of specialty pipeline coatings which, for over 35 years, have been used for sealing and corrosion protection of pipeline joints and other substrates. Canusa high performance products are manufactured to the highest quality standards and are available in a number of configurations to accommodate your specific project applications.



Product Description

The **GTS-PP-120 3Layer** system provides superior corrosion protection, resistance to soil stress and excellent bonding to polypropylene coated pipelines operating up to 120°C. **GTS-PP-120 3Layer** has been designed with a unique crosslinked polypropylene backing and copolymer adhesive technology. Much lower installation preheats are required compared to other polypropylene based systems.

Key Product Advantages

- **PP construction as required for elevated temperature pipelines,**
- **Superior adhesive technology allows for direct bond to factory applied PP coating,**
- **Proven performance with thick build liquid epoxy,**
- **Highly responsive shrinkdown rates and one-piece sleeve design for fast and easy installation.**

Features & Benefits

Superior Force Cured Epoxy Method

Canusa's proven method of force curing the epoxy primer to the steel allows the installer to "pre-inspect" the joint prior to sleeve application. The epoxy will not be displaced during the aligning and shrinking stages of the sleeve installation. This provides the assurance that the pipe is fully protected. Canusa's epoxy primer can be applied to an even, nominal thickness for maximum corrosion protection.

Unique Adhesive Technology

Canusa's unique adhesive technology allows for lower installation pre-heats and superior bonding to PP and PE coatings. The adhesive has been formulated to bond directly to the main line coating; epoxy is applied to the steel only. The result is a superior bond to the substrate, easier application and significant cost savings.

Tough, Durable System

The polypropylene composition, including cross-linked polypropylene backing, of the **GTS-PP-120 3Layer** provides in service properties comparable to the factory applied PP coating and vastly superior to all PE systems.

Saves Time & Money

The **GTS-PP-120 3Layer** system saves time and money because it is installed by local labour using propane torches. The low installation pre heat requirement adds to the time savings.

GTS-PP-120 3 Layer

Product Comparison Guide

Choose your sleeve based on characteristics listed below.

Sleeve Operating Characteristics	Impact Resistance (J)	Hardness (Shore D)
GTS-PP-120 3Layer		
Maximum Operating Temperature	up to 120°C (248°F)	
Minimum Installation Temperature	120°C (248°F)	
Resistance to Circumferential Forces	excellent	
Resistance to Soil Stress	excellent	
Resistance to Axial Pipe Movement	excellent	
Main Line Coating Compatibility	PP	

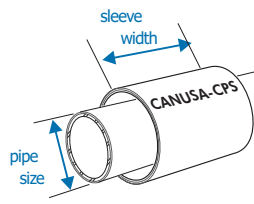
Epoxy Primer Information		Typical Primer Coverage	
GTS-PP-120 3Layer requires epoxy on the cut-back area only.			
Epoxy Primer Kits This kit includes measured quantities of base resin and cure, a stirring stick, applicator pad or roller and gloves. The kit contains sufficient primer for up to 1 square meter (10 sq. ft) of coverage. For example: 1 kit is sufficient for a 915mm (36") diameter pipe with a 300mm (12") total cutback.			
Bulk Epoxy Primer Bulk epoxy components must be ordered separately. The mixing ratio for the primer is 3 parts base, 1 part cure by volume, and 4.3 parts base, 1 part cure by weight. Pumps are available to facilitate mixing operation. Average coverage for bulk primers is 10 square meters per U.S. gallon, (110 sq. ft./U.S. gallon).			
Pipe diameter	mm	in	joints/US gallon
170	6.6		65
230	8.6		43.5
280	10¾		39
315	12¾		35
400	16		30
450	18		27.5
500	20		21.5
610	24		17.5
760	30		14
915	36		11.5
1060	42		10
1220	48		9
1422	56		7.5
1525	60		7
Epoxy Properties			
Pot life @ 23°C (73°F)	12 minutes		
Typical epoxy coated thickness	12 - 15 mils		
Shelf Life @ 23°C, out of sunlight	3 years		

Typical Product Properties

Adhesive	Test Standard	Unit	GTS-PP-120 3Layer
Softening point	ASTM E28	°C (°F)	>125 (257)
Lap shear	ASTM D1002 (modified)	N/cm ² (psi)	290 (200)
Backing	Test Standard	Unit	GTS-PP-120 3Layer
Specific gravity	ASTM D792	--	0.93
Tensile strength	ASTM D638	MPa (psi)	28 (4000)
Elongation	ASTM D638	%	425
Hardness	ASTM D2240	Shore D	65
Volume Resistivity	ASTM D257	ohm-cm	2.0 x 10 ¹⁷
Dielectric Voltage Brkdown	ASTM D149	kV/mm	25
Penetration Resistance @95°C, 24hrs	ASTM G-17	kV	No Holiday at 10kV
Sleeve	Test Standard	Unit	GTS-PP-120 3Layer
Impact, 25kV after 30 drops	DIN 30 678	-	pass, no breakdown (>20 J)
Adhesion Strength	DIN 30672	N/cm	100
Cathodic Disbondment @ 23°C, 30 days	ASTM G8	mm rad	3
Cathodic Disbondment @ 95°C, 30 days	ASTM G42	mm rad	8
Water Absorption	ASTM D570	%	0.05
Low Temp. Flexibility	ASTM D2671-C	°C (°F)	-20 (-4)
Moisture Vapour Transmission @38°C, 90%RH	ASTM E-398	gm/24hr/100 sq. in.	< 0.05 gm/24hr/100 sq. in.
Soil Stress Creep Resistance, 95°C	TP-206	in/24hrs	<0.1
Hot Water Immersion Resistance, 95°C, 120days	ASTM D870	-	no blister or delamination, no water under sleeves

How To Order¹:

Dimensions & Ordering Info	GTS-PP-120 3L 810-450 BK WS	Ordering Options - Global Transmission Sleeve	
		Colour	Configuration
		BK-Black	GTS-PP-120 3Layer
		450mm (18"), other widths available upon request	
		55 - 1525 mm (2" - 60")	
		Canusa Epoxy Primer	
		1.5 mm (60 mils)	
		1.0 mm (40mils)	



Minimum Sleeve Width =
Bare Steel Dimension + 50 mm (2")
on each side of the pipe joint.

The above represent standard Wrapid Sleeve™ ordering options. Consult your Canusa representative for any unique project requirements.



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