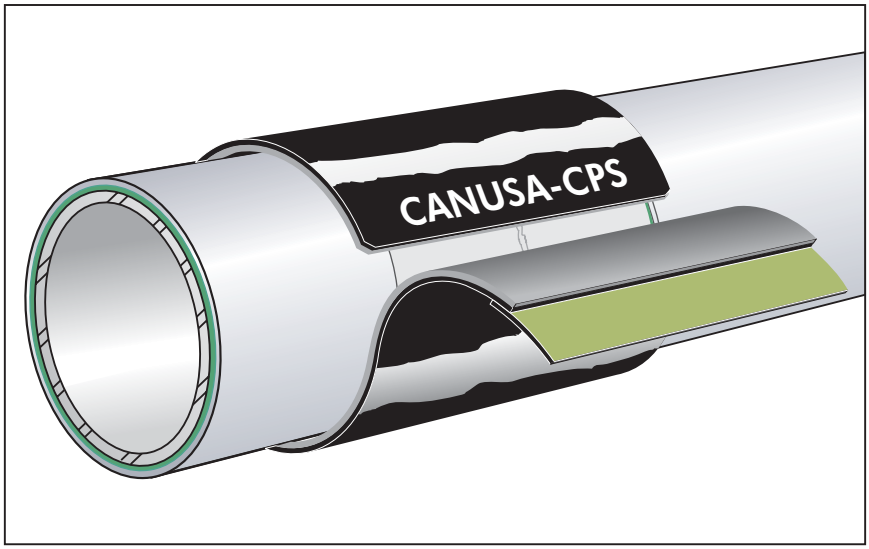
GTS-PP-100

One-piece protective sleeve with pre-attached closure for high operating temperature offshore polyolefin pipelines



Canusa-CPS is a leading manufacturer of specialty pipeline coatings which, for over 30 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-100 system provides excellent adhesion and superior corrosion protection to polyethylene and polypropylene coated pipelines operating offshore up to 100°C (212°F) [onshore up to 80°C (176°C)]. GTS-PP-100 sleeve has been designed with a unique crosslinked polypropylene backing and a high performance adhesive. The combination allows sleeve installation and bonding to polyethylene and polypropylene mainline coatings. Lower preheats are required versus other systems and superior bonding is achieved without damaging the coating during installation.

Features & Benefits

Unique Adhesive Technology

Canusa's unique adhesive technology allows for lower installation pre-heats and superior bonding to polyethylene and polypropylene coatings. The adhesive has been formulated to effectively bond directly to the mainline coating and the steel. The result is a superior bond to both substrates with quicker application.

Long Term Corrosion Protection

GTS-PP-100 provides superior corrosion protection because of the high performance system approach. The PP backing/adhesive combination provides protection with the structural integrity of an extruded coating, resulting in excellent resistance to cathodic disbondment and excellent durability against abrasion and impact. The result is effective, long term protection against corrosion.

Superior Shear & Impact Resistance

The GTS-PP-100 sleeve has superior impact and shear resistance by virtue of its polypropylene backing. The sleeve is particularly useful in offshore applications where in-service impact is expected. The rapid cooling characteristic of polypropylene allows better resistance to offshore laying rollers.

Rapid & Reliable Installation

Lower pre-heat means less time heating and improved production. The pre-manufactured sleeve means less time in handling, positioning and installation. The overall system minimizes installation time and labour costs while promoting high production rates onshore and offshore.

Applications

- Oil & Gas
- Offshore Pipelines
- Girth-Weld Joints
- Polypropylene

Configurations

- Wrapid Sleeve™
- 2-Layer

Pipe Sizes

- 115 - 1220 *(4″ - 48″)*

Temperature Range

- up to 100°C *(212°F)*
- up to 80°C *(176°F)*

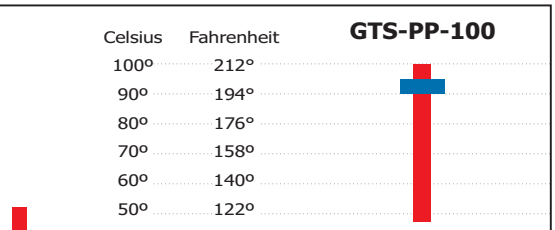
The product selection chart shown here is intended as a guide for standard products.
Consult your Canusa representative for specific projects or unique applications.

GTS-PP-100 Sleeve

One-piece protective sleeve with pre-attached closure for high operating temperature offshore polyolefin pipelines

Product Selection Guide

Sleeve Operating Characteristics



	GTS-PP-100
Offshore Pipeline Operating Temperature °C (°F)	100 (212)
Minimum Installation Temperature °C (°F)	90 (194)
Resistance to Impact	excellent
Resistance to Circumferential Forces	excellent
Resistance to Pipe Laying Shear Forces	excellent
Resistance to Axial Pipe Movement	excellent
Rapid Quenching Ability	excellent
Main Line Coating Compatibility	PE, PP

Typical Product Properties

		Test Standard	Unit	GTS-PP-100	
Adhesive	Specific Gravity	ASTM D792	g/cm³	1.01	
	Softening Point	ASTM E28	°C (°F)	124 (255)	
	Lap Shear @ 23°C (73°F)	DIN 30672	N/cm²	52	
	Lap Shear @ 50°C (122°F)	DIN 30672	N/cm²	2.75	
Backing	Specific Gravity	ASTM D792	g/cm³	0.93	
	Tensile Strength @ 23°C (73°F)	ASTM D638	MPa	25	
	Elongation at Break @ 23°C (73°F)	ASTM D638	%	350	
	Hardness	ASTM D2240	Shore D	65	
	Volume Resistivity	ASTM D257	ohm.cm	2×10^{17}	
	Low Temperature Brittleness @ -40°C (-40°F)	ASTM D746	–	pass	
	Stress Crack Resistance @ 50°C (122°F)	ASTM D1693	hours	2000	
Sleeve	Peel Strength @ 23°C (73°F)	DIN 30672	N/cm	50	
	Indentation	DIN 30672	Class C	pass	
	Impact	NF A 49-711	J/mm	10	
	Impact Strength	DIN 30672	Class C	pass	
	Cathodic Disbondment @ 23°C (73°F), 28 days	ASTM G8	mm	< 12	
				L	S
	Sleeve Thickness ("as supplied")		mm	2.1	2.5
	Sleeve Thickness ("fully recovered")		mm	3.0	3.5

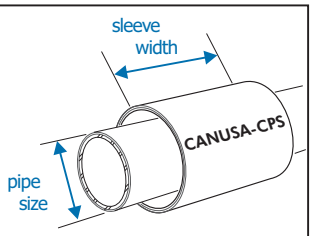
How To Order:

Dimensions & Ordering Info

GTS-PP-100 915-450 BK/L

- **Thickness**
- **Colour**
- **Sleeve Width**
- **Pipe Size**
- **Adhesive** (min. thickness as supplied)
- **Backing** (min. thickness as supplied)
- **Product Name**

Standard Ordering Options - GTS-PP-100	
L Thickness	S Thickness
L, S	
BK - Black	
450, 600 mm (18", 24")	
115 - 1220 mm (4" - 48")	
1.1 mm (45 mils)	**1.5 mm** (60 mils)
1.0 mm (40mils)	**1.0 mm** (40mils)
GTS-PP-100	



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

* Non-standard sleeve widths are available from 250mm up to 900mm

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A SHAWCOR COMPANY

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