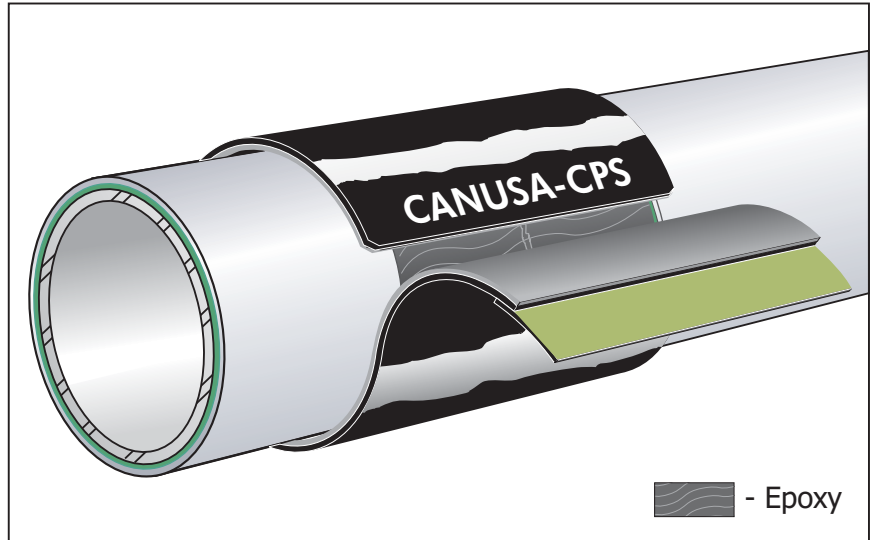


GTS-PP-100 3L

3-Layer High Performance Crosslinked Polypropylene Heat Shrink Sleeve System for the Girth Weld Protection of Polyolefin Coated Pipelines

For more than 35 years, Canusa-CPS has been a leading developer and manufacturer of specialty pipeline coatings for the sealing and corrosion protection of pipeline joints and other substrates. Canusa-CPS high performance products are manufactured to the highest quality standards and are available in a number of configurations to accommodate many specific project applications.



Product Description

The GTS-PP-100 3L 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°F)]. GTS-PP-100 3L 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.

Superior Shear & Impact Resistance

The GTS-PP-100 3L 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.

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.

Applications



Oil & Gas



Offshore Pipelines



Girth-Weld Joints



Polypropylene

Configurations



Wrapid Sleeve™



3-Layer

Pipe Sizes



115 - 1220 (4" - 48")

Temperature Range



up to 100°C (212°F)



up to 80°C (176°F)

GTS-PP-100 3L

Product Selection Guide

Sleeve Operating Characteristics	<table border="0"> <tr> <td>Celsius</td> <td>Fahrenheit</td> <td rowspan="7" style="text-align: center;"> Operating/Installation Temperatures </td> </tr> <tr> <td>100°</td> <td>212°</td> </tr> <tr> <td>90°</td> <td>194°</td> </tr> <tr> <td>80°</td> <td>176°</td> </tr> <tr> <td>70°</td> <td>158°</td> </tr> <tr> <td>60°</td> <td>140°</td> </tr> <tr> <td>50°</td> <td>122°</td> </tr> </table>	Celsius	Fahrenheit	Operating/Installation Temperatures 	100°	212°	90°	194°	80°	176°	70°	158°	60°	140°	50°	122°	Impact Resistance (J) 	
	Celsius	Fahrenheit	Operating/Installation Temperatures 															
100°	212°																	
90°	194°																	
80°	176°																	
70°	158°																	
60°	140°																	
50°	122°																	
	<table border="0"> <tr> <td>Offshore Pipeline Operating Temperature</td> <td>100 (212)</td> </tr> <tr> <td>Minimum Installation Temperature</td> <td>90 (194)</td> </tr> <tr> <td>Resistance to Impact</td> <td>excellent</td> </tr> <tr> <td>Resistance to Circumferential Forces</td> <td>excellent</td> </tr> <tr> <td>Resistance to Pipe Laying Shear Forces</td> <td>excellent</td> </tr> <tr> <td>Resistance to Axial Pipe Movement</td> <td>excellent</td> </tr> <tr> <td>Rapid Quenching Ability</td> <td>excellent</td> </tr> <tr> <td>Main Line Coating Compatibility</td> <td>PE, PP</td> </tr> </table>	Offshore Pipeline Operating Temperature	100 (212)	Minimum Installation Temperature	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	Hardness (Shore D)
Offshore Pipeline Operating Temperature	100 (212)																	
Minimum Installation Temperature	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 3L
Adhesive	Specific Gravity	ASTM D792	g/cm ³ 1.01
	Softening Point	ASTM E28	°C (°F) 124 (255)
	Lap Shear @ 23°C (73°F)	DIN 30672	N/cm ² 52
	Lap Shear @ 50°C (122°F)	DIN 30672	N/cm ² 2.75
Backing	Density	ASTM D792	g/cm ³ 0.93
	Tensile Strength @ 23°C (73°F)	ASTM D638	MPa 28
	Elongation at Break @ 23°C (73°F)	ASTM D638	Shore D 425
	Hardness	ASTM D2240	% 65
	Volume Resistivity	ASTM D257	ohm.cm 2 x 10 ¹⁷
	Low Temperature Brittleness @ -40°C (-40°F)	ASTM D746	-- pass
	Di-electric Breakdown Voltage	ASTM D149	kV/mm > 25
Sleeve	Stree Crack resistance @ 50° (122°F)	ASTM D1693	hours 2000
	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 < 7	

How To Order:

Dimensions & Ordering Info	GTS-PP-100 3L 915-450 BK/L	Standard Ordering Options - GTS-PP-100 3L		<p>Min. Sleeve Width = Bare Steel Dimension + 50 mm (2") on each side of the pipe joint.</p>
		L Thickness	S Thickness	
		L, S		
		BK - Black		
		450, 600 mm (18", 24")		
		115 - 1220 mm (4" - 48")		
		1.4 mm (0.055")	1.5 mm (0.060")	
	0.9 mm (0.035")	1.1 mm (0.045")		
	GTS-PP-100 3L			

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



Canada

CANUSA-CPS
a division of SHAWCOR LTD.
25 Bethridge Road
Toronto, Ontario
M9W 1M7,
Canada
Tel: +1 (416) 743-7111
Fax: +1 (416) 743-5927

U.S.A./Latin America

CANUSA-CPS
a division of SHAWCOR INC.
2408 Timberloch Place
Building C-8
The Woodlands, Texas
77380, U.S.A.
Tel: +1 (281) 367-8866
Fax: +1 (281) 367-4304

Europe/Middle East

CANUSA SYSTEMS
a division of SHAWCOR UK LIMITED
Unit 3, Sterling Park
Gatwick Road
Crawley, West Sussex
England RH10 9QT
Tel: +44 (1293) 541254
Fax: +44 (1293) 541777

www.canusacps.com

Asia/Pacific

CANUSA-CPS
Bredero Shaw (S) Pte Ltd
#05-31, Blk 52, Frontier
Ubi Avenue 3
Singapore
408867
Tel: +65 6749-8918
Fax: +65 6749-8919