

SECON-X[®]

Flexible stainless steel pipe system
for gas stations, DEF and above ground fuel installations



Double-wall flexible pipe for automotive fuels including ethanol, biodiesel and blends, marine, jet fuels and DEF

System advantages

- flexible, double-wall
- impermeable and safe from corrosion
- fast and easy to install
- environmentally safe
- the most cost effective metallic pipe

General Description

SECON-X[®] is designed as an integrated primary/secondary pipe for fuel and DEF installations. Fast and easy installation without welding and minimum downtime on retrofits are only some of the major advantages of SECON-X[®]. SECON-X[®] is made in "endless" lengths, which eliminates the need for intermediate connections between beginning and end. Even distances beyond 1000 ft. can be covered with one single pipe.

Construction

SECON-X[®] is a flexible pipe system with a stainless steel primary pipe capable of being tested and even monitored (underground installations only) for leaks. The SECON-X[®] double wall pipe system consists of a helically corrugated stainless steel primary pipe and a PA/LDPE secondary containment pipe. Helical channels are formed by the geometry of the primary pipe around the circumference, aided by longitudinal channels in the secondary pipe. Both extend over the entire length of the pipe. These longitudinal channels between the primary and secondary pipe provide the necessary annular space for the safe and contained flow of leaking product along and within the integral pipe.

The SECON-X[®] stainless steel primary pipe is not only corrosion resistant against all currently used, and most likely future fuels, but also prevents permeation. The fact that the pipe is made from 316L stainless steel eliminates the need for any additional cathodic protection.



Sizes and Pressure ratings

Available sizes: 1", 1 1/2", 2" and 3"

Max. operating pressure: 145 PSIG /10.0 bar (except 3") or to full vacuum. The operating temperature range is -13 °F to +122 °F.

Connection method

The SECON-X[®] end fitting is made of 316L stainless steel with fuel resistant elastomeric seals for both the primary and the secondary pipe. It is equipped with a test port for testing and monitoring. The end fitting is easy to assemble, requiring only common tools.

The end fitting is available with the following terminations:

- Thread (NPT, BSP)
- EZ-Fit

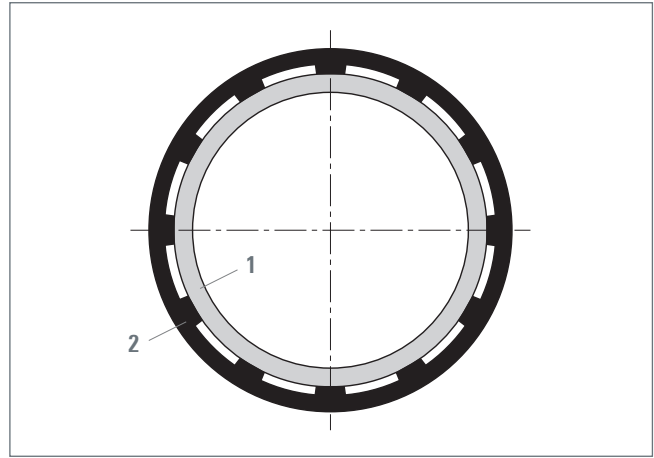
Installation

SECON-X[®] is available in coils of the required lengths. The corrugated primary pipe gives this pipe extraordinary good bendability for ease of installation. SECON-X[®] can easily be cut to the required lengths on site and – where necessary – bent at very tight radii. Unlike with plastic piping there is virtually no recoil once bent. A feature that makes the contractor's job a lot easier and faster, and also saves money, too.



SECON-X® end fitting

Available in NPT, BSP, EZ-Fit



SECON-X® construction

- 1 Corrugated stainless steel primary pipe
- 2 Internally fluted PA/LDPE jacket

Technical data of SECON-X® pipes

Item	SECON-X®	SEC 1"	SEC 1 ½"	SEC 2"	SEC 3"
Pipe size		1"	1 ½"	2"	3"
Material	<ul style="list-style-type: none"> • primary pipe: stainless steel 316L • secondary pipe: PA/LDPE 	•	•	•	•
Max. operating pressure (PSIG / bar)		145 / 10	145 / 10	145 / 10	50 / 3.5
Secondary containment pipe	<ul style="list-style-type: none"> • closed (PSIG / bar) • open (PSIG / bar) 	50 / 3.5	50 / 3.5	5 / 0.35	5 / 0.35
Nominal ID (inch / mm)		1" / 25	1 ½" / 40	2" / 50	4" / 100
Dimensions	<ul style="list-style-type: none"> • internal diameter (inch / mm) • external diameter (inch / mm) 	1.2 / 30	1.9 / 48	2.4 / 60	3.9 / 98
Volume	<ul style="list-style-type: none"> • volume primary pipe (gal/ft) / (l/m) • volume interstitial (gal/ft) / (l/m) 	0.06 / 0.8	0.16 / 2.0	0.24 / 3.0	0.67 / 8.4
Min. bending radius	• with bending machine (inch / mm)	18 / 450	24 / 600	30 / 750	41 / 1050
Weight (lb/ft) / (kg/m)		0.52 / 0.78	1.18 / 1.76	1.3 / 1.94	3.15 / 4.7
Available service (per UL)	<ul style="list-style-type: none"> • open • closed 	•	•	•	•
Leak monitoring	<ul style="list-style-type: none"> • vacuum (PSI / bar) • pressure up to (PSIG / bar) 	-8.7 / -0.6	-8.7 / -0.6	-8.7 / -0.6	-8.7 / -0.6
		50 / 3.5	50 / 3.5	5 / 0.35	5 / 0.35

All technical data subject to change.



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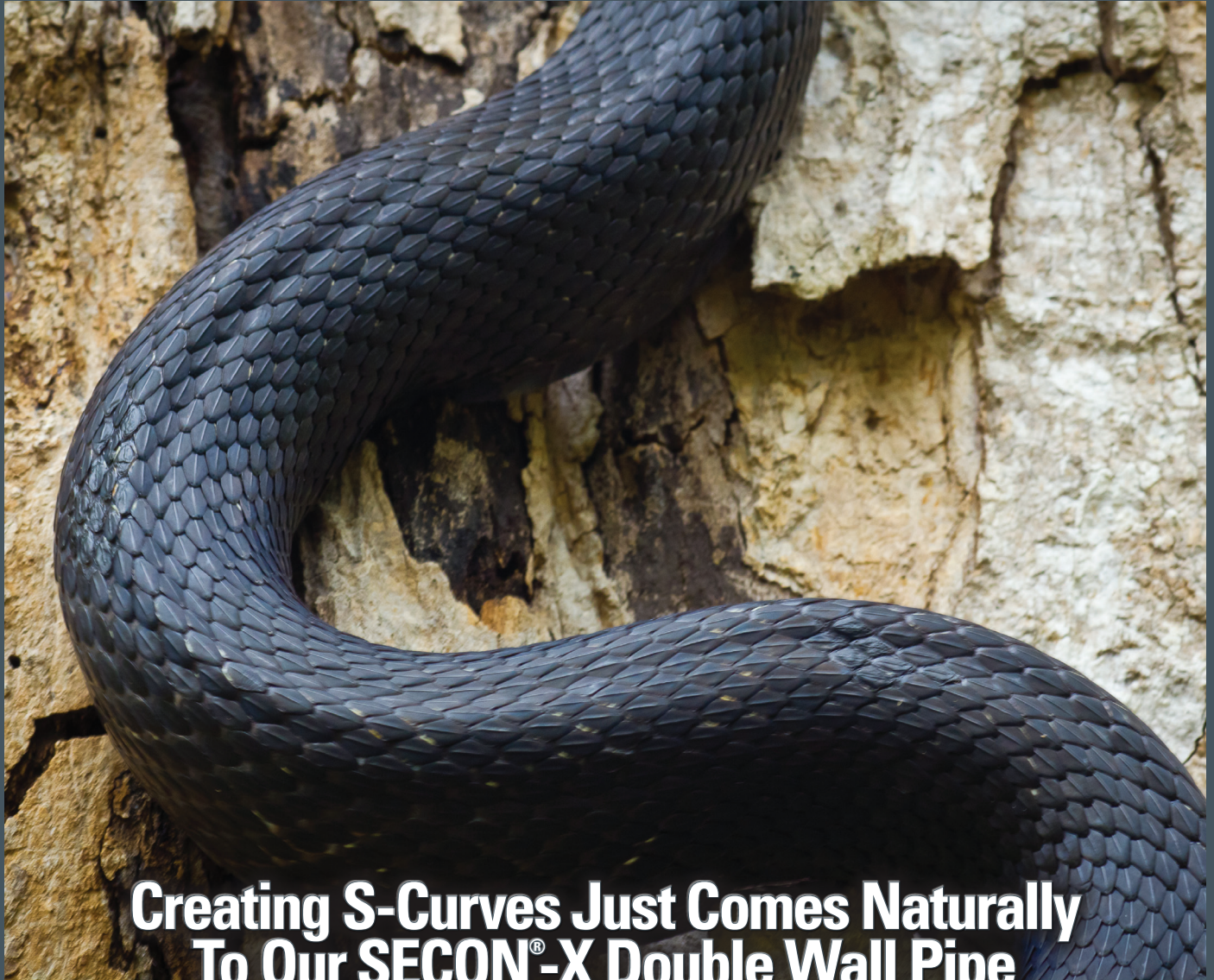
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A company of the BRUGG Group

BRUGG PIPESYSTEMS
 Flexible solutions

SECON[®]-X

The advanced pipe system for today's gas stations



Creating S-Curves Just Comes Naturally To Our SECON[®]-X Double Wall Pipe

Actually, a snake is really nothing more than a double-wall pipe with a strong inner member (*a spinal column*) and a pliable outer layer (*muscle*). This allows it to flex and handle tight bends.

SECON-X uses the same idea by combining a helically corrugated stainless steel primary pipe with a LDPE/PA secondary casing into one highly flexible, double-wall pipe. The benefit? Plastic pipes snap back when they are bent. However the corrugated steel inner pipe of **SECON-X** lets you handle S-Curves

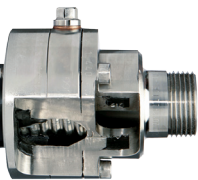
and obstacles with ease without springing back. UL Listed, seamless, joint-free — **SECON-X** just outclasses the rest.

Like a snake **SECON-X** has only two fittings per run. Which means it installs fast and has less potential for leaks.

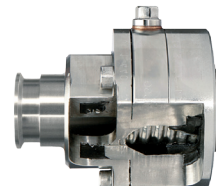
But its stainless steel construction isn't affected by temperature — which gives it a big advantage over its cold-blooded cousin.

Used for over 30 years and in thousands of installations, **SECON-X** has proven itself to be the most cost-effective, flexible pipe for gas station applications today.

Next time you have to snake around a gas station, think about all the advantages that **SECON-X** offers. We think you'll be highly tempted.



End fitting with NPT thread



End fitting with EZ-Fit connector

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PIPE SYSTEMS
Flexible solutions

