SECON®-X

Pipe system for petrol/gas stations and marinas

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

System advantages

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

General Description

SECON®-X has been specially developed as a coaxial pipe for underground service in petrol/gas stations. Fast and easy installation without welding, early completion and minimal downtime on retrofits are only some of the major advantages of SECON®-X.

Construction

SECON®-X is a flexible pipe system with a stainless steel primary pipe capable of being tested and even monitored for leaks. The SECON®-X double wall pipe system consists of a helically convoluted stainless steel primary pipe, and a polyethylene secondary containment casing 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 carrier and casing pipe provide the necessary annular gap for the safe and contained flow of leaking product along and within the coaxial pipe.

The stainless steel primary pipe of SECON®-X is not only safe from corrosion but is also a permeation proof barrier. It is also capable of handling the future generation of automotive fuels. Being made of corrosion proof materials SECON®-X does not need any additional cathodic protection.

Applications

SECON®-X pipes, subject to compliance with local and national requirements, are designed for use as:

- Suction pipes
- Pressure pipes
- Fill pipes

Sizes and Pressure ratings

Available sizes: ND (nom. bore) 40 (1 ½"), 50 (2") and 100 (4")
Max. operating pressure: +10.0 bar (145 PSIG) or to full vacuum.

Connection method

For connectors see data sheet No. 5.01.16 to 5.01.20.
A special graphite ring is used to seal between the corrugated (primary) pipe and the connector.
The connector can be supplied with:

- Weld neck
- Thread
- Loose flange or split flange

The seal between the secondary PE pipe and the connector is achieved with a boot.

Installation

SECON®-X is available ex works coiled in lengths of up to 150 m (500 ft). The convoluted 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 spring back once bent. A feature that makes the contractors job a lot easier and quicker. It also saves money.

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Flexible solutions

Fig.1: SECON®-X connection:
Non-weld, flared end, ending with round or oval collar flanges. Threaded male adaptors also available.

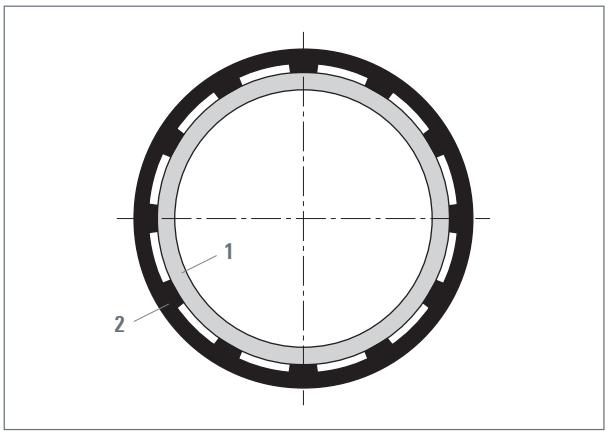

Fig. 2: SECON®-X construction:
1 convoluted stainless steel primary pipe
2 internally fluted PE-LD jacket

Physical properties of SECON®-X pipes

Type designation:	SECON®-X	SEC 40	SEC 50	SEC 100
material:	• primary pipe: stainless steel EN 1.4571*	•	•	•
	• secondary pipe: PE-LD	•	•	•
max. operating pressure for:	• all connector types	+10,0 bar / 145 PSIG	+10,0 bar / 145 PSIG	+10,0 bar / 145 PSIG
nominal bore**:		ND 40 / 1 ½“	ND 50 / 2“	ND 100 / 4“
dimensions:	• internal diameter	48 mm	60 mm	98 mm
	• external diameter	63 mm	75 mm	121 mm
	• volume primary pipe (litres/lin. m)	2.00	3.00	8.40
mean bending radius:		300 mm (12“)	400 mm (16“)	800 mm (31“)
weight:	kg/lin. m (lb/ft)	1.6 (1.0)	2.1 (1.4)	4.7 (3.1)
available type of connectors:	• weld neck	•	•	not available
	• threaded***	•	•	not available
	• loose flange or split flange	•	•	•
Recommendation for use: *	• suction line	•	•	
	• pressure pipe	•	•	•
	• gravity fill pipe			•

* sizing in accordance with actual heads loss computations for gaseous or liquid gasoline

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