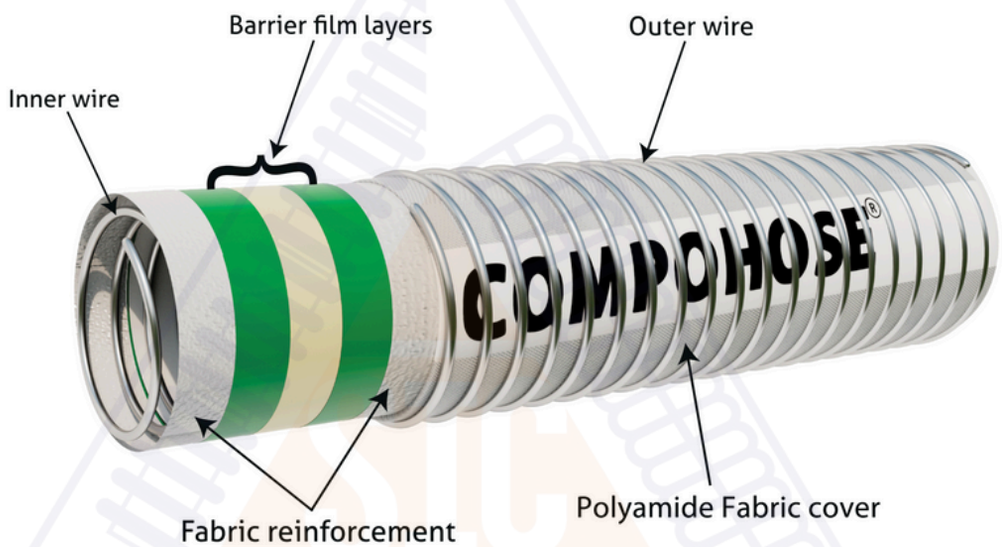
LNG

The Compohose LNG represent a specialized category of hoses meticulously engineered to facilitate the secure and efficient conveyance of cryogenic fluids, including substances like liquefied natural gas (LNG) and liquid nitrogen. These hoses are specifically designed to manage the challenges posed by the extreme cold temperatures at which these fluids exist, ensuring the utmost safety and effectiveness during fluid transfer operations. These hoses are crafted by combining various layers of distinct materials, each serving a unique purpose to enhance overall performance and reliability.

Compliance: Cryogenic hoses are manufactured in accordance to EN 13766 / 2018 Class A Type 2 and Class B type 2



Construction:

Hose Type - SNS

Inner wire - Stainless Steel 316/ 304

Inner Lining - Multiple layers of Polyamide Fabric and Polyester Barrier Layers

Outer wire - Stainless Steel 316/ 304

Cover - Abrasion-resistant Polyamide Fabric

End fitting - As per client requirements, externally crimped and swaged

Features:

1. **Tough Polyamide Fabric outer cover resists dragging, wearing, abrasion, UV and ozone resistance ensures maximum durability and safety**
2. **Maximum Compatibility - Handles a wide range of low temperature & cryogenic conveyants.**
3. **Light Weight & Highly Flexible**
4. **Double end to end electrical continuity prevents static electricity build up and internal arcing.**
5. **Reliability - Tested to industry standards 1.5 times the rated working pressure.**
6. **Suitable for 0.9 Bar Vacuum rating.**
7. **Working Pressure: Class A Type 2 – 13 Bar (185 PSI) & Class B Type 2 – 10.5 Bar (149 PSI)**
8. **Safety factor 4:1 as per EN 13766 / 2018**
9. **Temperature Range for this hose is -196° C to +50° C**

Applications:

Refrigerated Transport: Cryogenic hoses are essential for loading and unloading fully refrigerated gases like LNG onto transport vehicles such as trucks, railcars, and ships. The hoses can handle the temperature fluctuations during transit and provide a safe means of transfer.

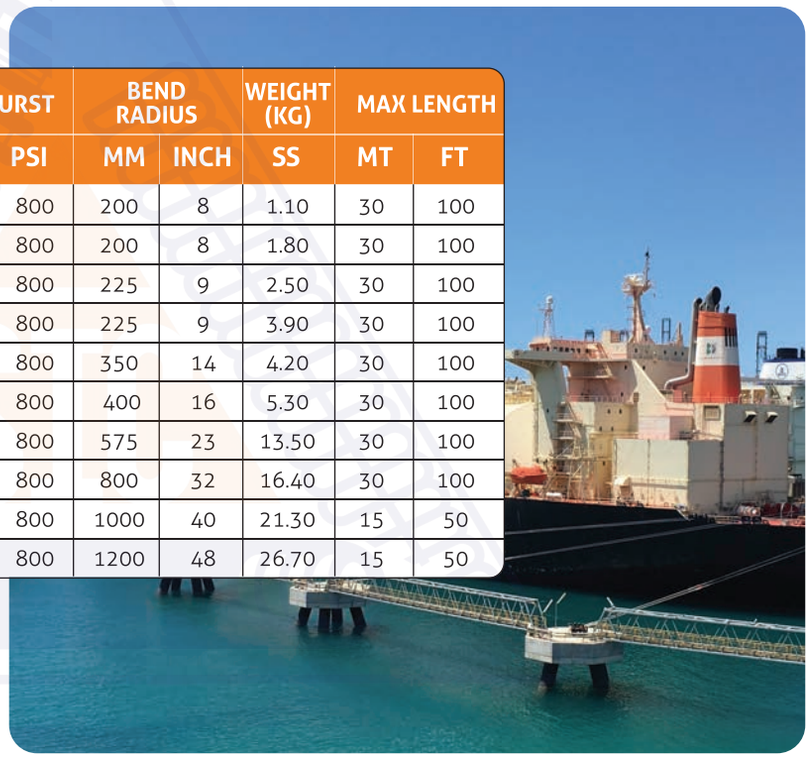
Industrial Gas Plants: Cryogenic hoses are employed in industrial settings for handling various gases used in processes. These hoses are especially valuable when dealing with gases from Gas Group 4, 5, and 7, as they ensure the safe conveyance of potentially hazardous materials.

Liquefied Natural Gas (LNG) Operations: Cryogenic hoses play a role in LNG facilities, ensuring the smooth transfer of LNG between storage tanks, transport vessels, and processing units.

Cryogenic Storage and Distribution: Cryogenic hoses are used in the storage and distribution of cryogenic gases, including liquid nitrogen, oxygen, and argon, for various industrial processes, such as metal fabrication and medical applications.

Specification Table:

CODE	SIZE		MEAN OD	MAX W.P		MIN BURST		BEND RADIUS		WEIGHT (KG)	MAX LENGTH	
NAME	MM	INCH	MM	BAR	PSI	BAR	PSI	MM	INCH	SS	MT	FT
LNG05SS25	25	1"	37	13	200	52.5	800	200	8	1.10	30	100
LNG05SS38	38	1.5"	51	13	200	52.5	800	200	8	1.80	30	100
LNG05SS50	50	2"	65	13	200	52.5	800	225	9	2.50	30	100
LNG05SS65	65	2.5"	77	13	200	52.5	800	225	9	3.90	30	100
LNG05SS75	75	3"	90	13	200	52.5	800	350	14	4.20	30	100
LNG05SS100	100	4"	121	13	200	52.5	800	400	16	5.30	30	100
LNG05SS150	150	6"	179	13	200	52.5	800	575	23	13.50	30	100
LNG05SS200	200	8"	233	13	200	52.5	800	800	32	16.40	30	100
LNG05SS250	250	10"	284	13	200	52.5	800	1000	40	21.30	15	50
LNG05SS300	300	12"	333	13	200	52.5	800	1200	48	26.70	15	50



Safety Standards:

Rigorous Safety Testing: COMPOHOSE® assemblies undergo comprehensive testing, conducted at 1.5 times the rated Working Pressure (W.P). This stringent testing adheres to the EN 13766 standard, ensuring a paramount level of safety and reliability.

Provision of Manufacturer's Test Certificate: With each supply of COMPOHOSE® composite hose assemblies, a Manufacturer's Test Certificate is included. This certificate serves as a confirmation of the product's quality and compliance with safety standards, providing added assurance to users.

Clear Burst Pressure Specification: The burst pressure of the composite hose is explicitly indicated for ambient temperature conditions. This vital information enhances safety awareness and empowers users to operate within secure pressure limits.

Effective Electrical Continuity: The composite hose's electrical continuity is assured through the integration of two bonded wires connected to the end fitting. This innovative design promotes the dissipation of accumulated electrical charges, mitigating the risk of static flashes and associated hazards.