

PTFE



COMPOTEC® PTFE is a composite hose consisting of an inner virgin pure PTFE core, reinforced with many other layers, such as thermoplastic films and polypropylene, polyethylene and polyester based fabrics. All layers are overlapped to form a strong but flexible structure, locked between inner and outer steel spiral wires.

As an external cover, a special Polyvinylchloride coated fabric, is used for the purpose of protection and identification. It's resistant to atmospheric agents and abrasion. All the different layers are precisely overlapped on each other with predefined angles and, subsequently, compressed between two spirals, one internal and one external.

This engineering gives to **COMPOTEC®** hoses, lightness, flexibility and the ability to operate at certain pressures and temperatures that fully satisfy the requirements of the chemical industry and related transports, either by trucks or by railway tanks.

FEATURES & APPLICATIONS - COMPOTEC® PTFE is manufactured in accordance with the standard EN 13765:2018 (BS 5842:1980) and the guidelines NAHAD 600/2005. Extremely flexible and easy to handle, **COMPOTEC® PTFE** is generally used for the transfer of aggressive and corrosive chemical products, under pressure or suction. It is also used in Outdoor or Indoor application, for the transfer from tank trucks, rail trucks, loading or unloading of silos and on pumps and process machinery. Suitable for any chemical product, thanks to the PTFE chemical inertness. All the hoses are 100% resistant to aromatics and can be used both for suction & delivery. Vacuum rating is 0,9 bar, according to the EN ISO 7233 method B. **COMPOTEC® PTFE** hose's assemblies are fitted with an extensive range of couplings readily available, externally swaged with crimping ferrules in Stainless or Galvanized Steel.

SAFETY SPECS - COMPOTEC® PTFE hoses have a 5 : 1 Safety Factor and they are tested at 1,5 times working pressure, in accordance with the construction standards and the Directive CE PED 2014/68/EU.

The hose is permanently marked on the external ferrule in compliance with Directive CE PED 2014/68/EU. The hose is supplied with a Declaration of Conformity and Use and Maintenance Manual. Additional test certifications can be supplied on request. The burst pressure indicated is intended at ambient temperature in accordance with EN 13765:2018. They are manufactured in accordance with the requirements of Par. 2:12 and 5:7 of the IMO Chemical Carrier Code and they are Type Approved by Lloyd's Register, Certification n° 13/00002/E1.

Electrical continuity is achieved by its two wires bonded to end fittings and ferrules and this system helps to dissipate the electrostatic charges accumulated. The electrical resistance of assembled hoses, is less than 100 Ohm, as required by EN ISO 8031:2020, 4.8. On request it is possible to manufacture the hose in accordance to the Directive 2014/34/UE ATEX, with special black antistatic conductive external cover, the grounding cable, and the related documentation.

RANGE

PTFE 300 HD - HEAVY DUTY

Heavy Duty construction, for the transfer of a wide range of aggressive chemical products under suction or pressure, widely used for many applications. Used for transfer: Ship to Shore, Ship to Ship, Dockside and, in general, for the most arduous Industrial and Marine applications which require higher operating pressures and stresses. Available in 40 mt coils from 3/4" to 8", 25 mt length up to 12" and 12 mt up to 16".

PTFE SD - STANDARD DUTY

Flexible hose for standard duties; suitable for the safe transfer of a wide variety of aggressive chemicals, under suction or pressure. Commonly used for loading and unloading of road and rail tankers, storage tank and in-plant applications. Ideal for paint industries, being easy to wash and sterilize with steam.. Available in 40 mt coils from 1- 1/2" up to 8".

PTFE HD NANOTEC® (Patent N° IT0281052)

Heavy Duty construction, engineered with the latest and highest standards of polymer nanotechnology, **NANOTEC®**, combines unique mechanical and chemical resistance with ZERO porosity. The film, obtained with **NANOTEC®** technology is more flexible and tear-resistant than other traditional PTFE semi-finished products. It is composed of 100% VIRGIN PTFE, making it resistant to any chemical aggression and corrosion, while preserving all its physical properties, regardless the surrounding environment. Thanks to an innovative cross-lamination process, **NANOTEC®**, has incredible superior tear resistance, outstanding durability and operating temperatures. **FDA** and **CE Food grade** approved. **NANOTEC®** technology is an exclusive and unique PATENTED DESIGN, belonging to MATEC® GROUP (Patent N° IT0281052).

Recently introduced, the new version **NANOTEC® BLACK**, a black color film, with antistatic properties in addition to all the many advantages of the Standard **NANOTEC®** film. Also the Black NANOTEC is **FDA** and **CE Food grade** approved



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HEAVY DUTY AGGRESSIVE CHEMICAL SUCTION & DELIVERY- EXCEEDS EN 13765:2018 TYPE 3

Size		Safety Factor	Working Pressure	Bending Radius EN ISO 1746	Weight	Length
mm	Inch	S.F. 5:1	Bar / PSI	mm	Kg. / mt	Mt.
20	3/4"	5:1	15 / 220	75	0,87	40
25	1"	5:1	15 / 220	100	0,98	40
32	1 1/4"	5:1	15 / 220	125	1,18	40
40	1 1/2"	5:1	15 / 220	140	1,57	40
50	2"	5:1	15 / 220	180	1,95	40
65	2 1/2"	5:1	15 / 220	220	2,78	40
75/80	3"	5:1	15 / 220	280	3,31	40
100	4"	5:1	15 / 220	400	5,55	40
125	5"	5:1	15 / 220	485	7,25	40
150	6"	5:1	15 / 220	500	11,23	40
200	8"	5:1	15 / 220	800	15,30	40
250	10"	5:1	15 / 220	1000	23,49	25
300	12"	5:1	15 / 220	1200	29,44	25
350	14"	4:1	15 / 220	1400	36,10	12
400	16"	4:1	15 / 220	1600	40,20	12

PTFE 300 HD

Code	PTFE HD XZ	PTFE HD XX
Application	Heavy Duty Aggressive Chemical liquid transfer	
Colour	Red	
Temperature	-40 +100°C	
Inner wire	S.S. 304/316	S.S. 304/316
Outer wire	Galvanized	S.S.304/316

HEAVY DUTY - HIGH PERFORMANCE AGGRESSIVE CHEMICAL S&D - Exceeds EN 13765:2018 TYPE 4

Size		Safety Factor	Working Pressure	Bending Radius EN ISO 1746	Weight	Length
mm	Inch	S.F. 5:1	Bar / PSI	mm	Kg. / mt	Mt.
20	3/4"	5:1	15 / 220	75	0,93	40
25	1"	5:1	15 / 220	100	1,05	40
32	1 1/4"	5:1	15 / 220	125	1,25	40
40	1 1/2"	5:1	15 / 220	140	1,67	40
50	2"	5:1	15 / 220	180	2,02	40
65	2 1/2"	5:1	15 / 220	220	2,93	40
75/80	3"	5:1	15 / 220	280	3,49	40
100	4"	5:1	15 / 220	400	5,77	40
125	5"	5:1	15 / 220	485	7,25	40
150	6"	5:1	15 / 220	500	11,37	40
200	8"	5:1	15 / 220	800	15,43	40
250	10"	5:1	15 / 220	1000	23,87	25
300	12"	5:1	15 / 220	1200	29,88	25
350	14"	4:1	15 / 220	1400	36,60	12
400	16"	4:1	15 / 220	1600	40,70	12

PTFE HD NANOTEC®

Code	PTFE NANOTEC® XZ	PTFE NANOTEC® XX
Application	High temperature transfer of Aggressive Chemicals	
Colour	Red	
Temperature	-40 +140°C (peaks of 160°C)	
Inner wire	S.S. 304/316	S.S. 304/316
Outer wire	Galvanized	Inox 304/316

STANDARD DUTY AGGRESSIVE CHEMICAL SUCTION & DISCHARGE HOSE - EXCEEDS EN 13765:2018 TYPE 2

Size		Safety Factor	Working Pressure	Bending Radius EN ISO 1746	Weight	Length
mm	Inch	S.F. 5:1	Bar / PSI	mm	Kg. / mt	Mt.
40	1 1/2"	5:1	10 / 150	100	1,53	40
50	2"	5:1	10 / 150	150	1,92	40
65	2 1/2"	5:1	10 / 150	200	2,57	40
75/80	3"	5:1	10 / 150	250	3,00	40
100	4"	5:1	10 / 150	300	4,31	40
125	5"	5:1	10 / 150	401	5,40	40
150	6"	5:1	10 / 150	500	10,51	40
200	8"	5:1	10 / 150	740	13,97	40

PTFE SD

Code	PTFE SD XZ	PTFE SD XX
Application	Aggressive chemical transfer	
Colour	Red	
Temperature	-30 +80°C	
Inner wire	S.S. 304/316	S.S. 304/316
Outer wire	Galvanized	S.S. 304/316