

# HITEMP 305 For Extreme Temperatures



**CONSTRUCTION:** COMPOTEC® HITEMP 305 is a multi-layer thermoplastic hose designed around several Fluoropolymers liners, supported by a Stainless Steel inner wire, and reinforced with films and fabrics specifically designed for high temperature applications. All the different layers are wrapped together and tensioned between internal and external wire spirals.

COMPOTEC® HITEMP 305 utilizes the new PTFE laminate film NANOTEC®, obtained with the latest and highest standard of Nanotechnology, ensuring unique mechanical strength and ZERO porosity, NANOTEC® technology is a Patented Design exclusive and unique, belonging to MATEC GROUP. Includes in the construction an FEP seamless tubular extruded film, to avoid any possible leak and guarantee a gas-tight construction. Outer cover is made in ELASTAR, a special High temperature resistant PU coated fabric; its UV, Ozone, Sunlight and weathering resistance, offers as well superior abrasion resistance characteristics. Available in 40 mt coils from 3/4" to 4" and 25 mt length up to 12".

**APPLICATIONS:** COMPOTEC® HITEMP 305 is specifically designed as an hose for the transfer of hot oil and bitumen under positive or negative pressures, HITEMP 305 hose are used in such applications as transfer for rail and road tanker loading and unloading, storage tank and in-plant use. Extremely flexible, easy to handle and bend, even at very high or very low outdoor temperatures. All hoses are 100% aromatic resistant, antistatic and can be used for suction or discharge. Vacuum rating is 0,9 bar, according to the EN ISO 7233 method B. Thanks to the inner PTFE NANOTEC® construction, nothing sticks to the inner wall of the hose, and due to absence of inner corrugations or convolutions, (smooth body), nothing will remain trapped in it.

COMPOTEC® HITEMP 305 hoses can be supplied in the FIRETEC version to meet the Fire retardand performance criteria acc. to European Standards EN 13765:2010 Normative, Annex G, and with ADR self-extinguish CL1 characteristics.

The special series of HITEMP 305 FIRETEC hoses, are mainly used for cooling application in the Steel industry. On specific request, it is possible to supply hoses electrically discontinuous (non conductive), in particular for the Induction ovens in Steel plants. Additional fire resistant films and fabrics are included in the construction to ensure a good thermal insulation and a low conductivity from the outside to the inside. The special series of COATED FIRETEC hoses, have additional external heat resistant layers, to withstand the action of eventual splashes of fused metals.

The coating can be made in various materials:

**HITEMP FIRETEC STD:** Black colour self estinguish CL 1 coating. Additional underlayers of glass fabrics and Aluminium films to act as a heat and fire barrier.

**HITEMP FIRETEC GLASS:** Outer cover made with Glass fabric type E , with good thermal characteristics and fire resistance properties.

**HITEMP FIRETEC PIROJACKET:** Special outer cover made with red silicone impregnated silica fabric, combines handling properties and extreme temperature resistance.

**COMPOTEC® HITEMP 305 TWINHOSE** it's a special type of hose designed for the transfer of HIGHLY viscous products, at temperatures that can reach 200° C. To improve the durability, reliability, and ensure absolute absence of leaks, we included a coaxial interlock liner, made in steel with a smooth bore structure, in order to avoid any stagnation of the product once the loading / unloading operations are finished, and to avoid any wire displacement due to the high viscosity of the products flowing in the hose.

COMPOTEC® HITEMP 305 assemblies are fitted with an extensive range of couplings also available PTFE taffed or with the new exclusive EPTAFILON treatment, externally swaged with Stainless Steel ferrules. Upon request it is possible to supply electrical insulating fittings, with the EBONITE coating.

A 3 mt x 6" assembly of COMPOTEC® FIRETEC hose, filled with liquid F of ISO 1817, has been independently tested in an outdoor application, and subjected to direct naked flame. After the test, the hose has maintained its structure intact, with no significant alteration.

COMPOTEC® assemblies are tested in accordance with EN ISO 1402. The securing ferrule is permanently engraved, with hose datas, in compliance with PED Directive (97/23/ CE). The electric resistance of hose assemblies is less than 10 ohms, as required by EN ISO 8031 (BS 5842:1980 clause 6.2). Upon request it's possible to manufacture COMPOTEC® hoses in accordance to the Directive 94/9/EC "ATEX", with a special outer antistatic black cover, ground connection cable, for explosive environment. All COMPOTEC® meets the EN, CE, AS, U.S. Coast Guard requirements, NAHAD Guidelines, are Lloyd's and DNV approved.



## HIGH TEMPERATURE SUCTION & DISCHARGE HOSE EN 13765:2010 TYPE 4

Size		Maximum W.P.		Safety		Bend Radius (ENISO1746)		Weight		Maximum Length	
mm	Inch	Bar	P.S.I.	Factor	mm	Inch	Kg. / mt	Mt.	Feet		
20	¾"	15	200	5:1	75	3	0,86	40	132		
25	1"	15	200	5:1	100	4	1,23	40	132		
32	1 ¼"	15	200	5:1	125	5	1,49	40	132		
40	1 ½"	15	200	5:1	140	5 1/2	1,77	40	132		
50	2"	15	200	5:1	180	7	2,38	40	132		
65	2 ½"	15	200	5:1	220	8,5	3,48	40	132		
75/80	3"	15	200	5:1	280	11	4,28	40	132		
100	4"	15	200	5:1	400	16	7,05	40	132		
150	6"	15	200	5:1	575	23	17,30	40	132		
200	8"	15	200	5:1	800	32	24,40	40	132		
250	10"	15	200	5:1	1000	40	27,80	25	82		
300	12"	15	200	5:1	1200	48	36,70	25	82		

## HITEMP 305

Colours	HITEMP 305	
	HITEMP FIRETEC STD	Black
	HITEMP FIRETEC GLASS	White
	HITEMP FIRETEC PIROJACKET	Red
	HITEMP TWINHOSE	Black

Code	HITEMP ZZ	HITEMP XZ	HITEMP XX
Applications	High Temperature Hydrocarbons		
Temperatures	-40 + 200°C		
Inner wire	Galvanised Steel	Stainless Steel	Stainless Steel
Outer wire	Galvanised Steel	Galvanised Steel	Stainless Steel



## HITEMP TWINHOSE



## FIRETEC PIROJACKET





# HIGH TEMPERATURE

DNV Det Norske Veritas Cert. n. CERT-04193-99-AQ IND-SINCERT  
EN 13765:2010, approved from CEN  
Directive 97/23/CE "PED" with operating Procedures certified from DNV - CE PED 07.0056.06/2585  
Directive 94/9/CE "ATEX" hose for explosive atmospheres, Cert. held by DNV Rec. nr. CE ATE 08.0117.06/2617 - (AS 2430.1-1987)  
BS 5842:1980 (Conf. 1986)  
BS 3492:1987  
AS 2683-2000 (Hose & hose assemblies for distribution of petroleum and petroleum products)  
AS 2117-1991 (Hose & hose assemblies for petroleum and petroleum products - Marine suction and discharge)  
NAHAD Guidelines (NAHAD 600/2005)

#### Test procedures:

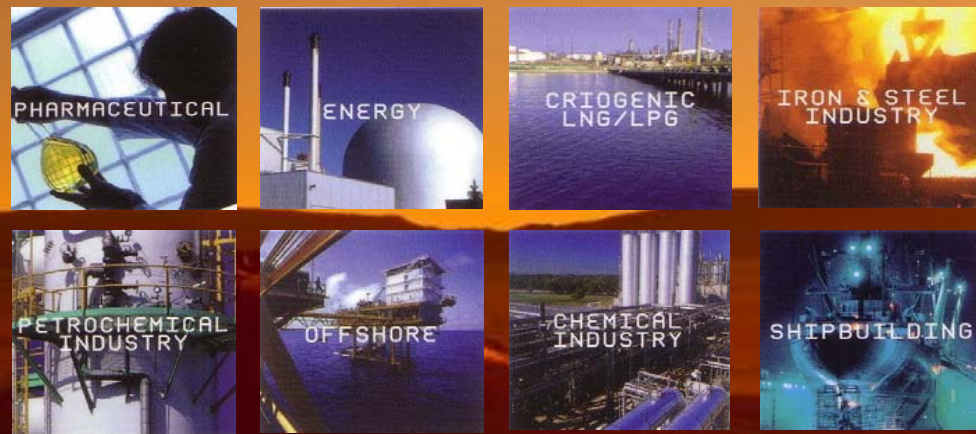
BS 5173-102.10:1990 section 102.10 - (EN ISO 1402)  
AS1180.5-1999 (method 5)  
AS 1180.13B (Electrical resistance)  
AS1180.13C (Electrical continuity)

#### Type Approval

Lloyd's Register Type Approved - Cert. N° 13/00002  
DNV - Det Norske Veritas - Type Approval Cert. N° P-12369  
RINA - Registro Italiano Navale - Cert. N° MAC/81398/1/TO/99  
Russian Maritime Register of Shipping  
IBC Code Chapter 5 - Ship's Cargo hoses  
IMO Chemical Carrier Code - Paragraphs 2:12 and 5:7

#### Welding Process

in according to EN 15608:2005 - EN 439:1996 - EN 15614-1:2005 - EN 6848:2005 - EN 12072:2001 certified by DNV - Det Norske Veritas  
in according to ASME IX certified by RINA



**MATEC GROUP SRL**  
VIA I MAGGIO, 7 - PESCHIERA BORROMEO (MILANO) - ITALIA  
Tel. +39 02 55 30 17 88 - Fax +39 02 54 72 158  
matec@matecgroup.com  
www.matecgroup.com

