

ABRATEC

COMPOTEC® ABRATEC 400 is a multi-layer thermoplastic hose designed around several **POLYURETHANE** liners, supported by a special abrasion resistant Martensitic High Chrome Stainless Steel inner wire, with a weather-proof and abrasion resistant outer cover made of Polymeric coated Polyester fabric. Outer cover is also available in **ELASTAR**, a special PU coated fabric; its UV, Ozone, Sunlight and weathering resistance, offers superior temperature and abrasion characteristics. All the different layers are wrapped together and tensioned between internal and external wire spirals.

Specifically designed as a universal hose for suction and discharge of a wide variety of abrasive products, both liquid, as industrial sludges, or solids, as powders, cereals, plastic granules, chips, sugar, flour under suction or pressure.

COMPOTEC® ABRATEC 400 hoses are used in such applications as transfer for rail and road tanker loading and unloading, storage tanks, silos and in-plant use. Extremely flexible, easy to handle and bend.

Commonly used for the transfer of **COAL WATER SLURRY FUEL, (CWS or CWSF)**, the new type of fuel which consist of fine particles of coal suspended in water.

The main advantage of this new type of fuel, is that permits to use coal equivalent to use liquid fuel or heating oil, but reduce the emission in the atmosphere of harmful emissions; in addition, by converting the coal into a liquid form, delivery and dispensing of the fuel can be simplified.

It is normally consisting of 55 to 70% of coal particles and 30 to 45% of water.

It can be used in place of oil and gas in heating and Power station.

The particles to be efficient typically need to be less than 20 micrometres in diameter. This means that the CWS is particularly abrasive and the a special Composite hose is necessary to guarantee the right performances.

COMPOTEC® ABRATEC 400 is manufactured according to the requirement specified by the European Standards EN 13765:2010 Type 3 (BS 5842:1980), and in accordance with the recommendations of NAHAD Guidelines (NAHAD 600/2005).

COMPOTEC® ABRATEC 400 hoses are **100% antistatic** and can be used for suction or discharge, the electric resistance of hose assemblies is less than 1 ohm/mt for the 50 mm size and above sizes, as required by EN ISO 8031:2009, 4.7.

Electrical continuity is achieved by the two wires bonded to the end fittings, this helps dissipate accumulated charge and to avoid static flash.

Upon request it's possible to manufacture ABRATEC 400 hoses in accordance to the Directive **94/9/EC "ATEX"**, with a special outer antistatic black cover and ground connection.

COMPOTEC® ABRATEC 400 assemblies are fitted with an extensive range of couplings readily available, externally swaged with Stainless, Galvanized Steel or Aluminium ferrules.

COMPOTEC® ABRATEC 400 assemblies are tested at 1 ½ times rated working pressures for safety and reliability, in accordance with EN ISO 1402 (BS 5842:1980 clause 6.4). The securing ferrule, at one end of the hose, is permanently marked by engraving, with manufacturer's name, nominal bore, serial number and the test date. Full test certification including Electrical continuity test, can be supplied on request.

Burst pressure indicated, is at ambient temperature when tested in accordance with EN ISO 1402 (BS 5173 section 102.10:1990).

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HEAVY DUTY ABRASION RESISTANT SUCTION & DISCHARGE HOSE EN 13765:2010 TYPE 3

Size		Max. W.P.		Safety factor	Bend Radius EN ISO 1746		Weight	Maximum length	
mm	inch	Bar	Psi		mm	inch	Kg/mt	Mt	Feet
20	3/4"	15	200	5:1	75	3	0,78	40	132
25	1"	15	200	5:1	100	4	0,96	40	132
32	1 1/4"	15	200	5:1	125	5	1,28	40	132
40	1 1/2"	15	200	5:1	140	5 1/2	1,50	40	132
50	2"	15	200	5:1	180	7	2,19	40	132
65	2 1/2"	15	200	5:1	220	8,5	3,13	40	132
75/80	3"	15	200	5:1	180	11	3,80	40	132
100	4"	15	200	5:1	400	16	5,29	40	132
150	6"	15	200	5:1	575	23	12,21	40	132
200	8"	15	200	5:1	800	32	17,14	40	132
250	10"	15	200	5:1	1000	40	24,92	25	82
300	12"	15	200	5:1	1200	48	33,82	25	82

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Code	ABRATEC XZ	ABRATEC XX
Applications	ABRASION RESISTANT HOSE	
Colour	Yellow	
Temperature	-40 +100°C	
Inner wire	AISI 400 Series St.Steel	AISI 400 Series St.Steel
Outer wire	Galv.Steel	St.Steel



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)

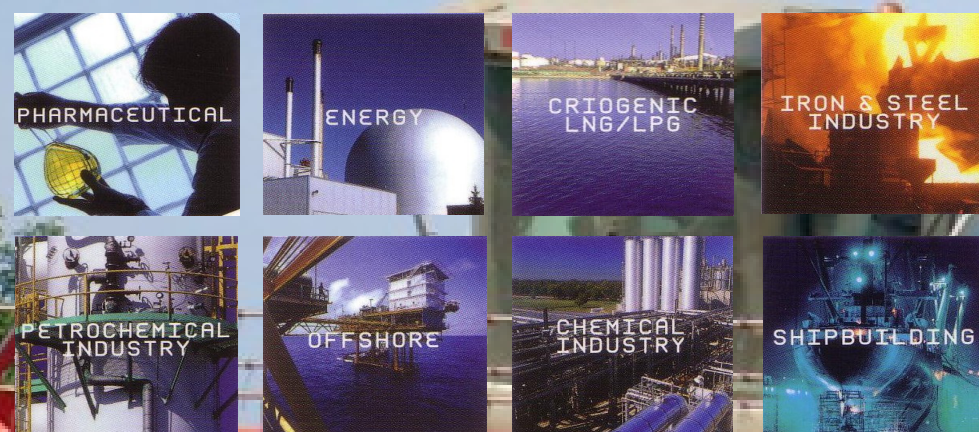
Type Approval

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

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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

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