

# HDS OIL / FUEL

HDS OIL FUEL is a multi-layer thermoplastic hose manufactured from Polypropylene, Polyethylene and Polyester films and Polypropylene fabrics, with a weatherproof and abrasion resistant outer cover made of Polyvinyl coated Polyester fabric. Outer cover is also available in ELASTOTHANE®, 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. This enables our product to meet the requirement of the Petrol -chemical industry and those of the Oil & Gas industry.

HDS assemblies are fitted with an extensive range of couplings readily available, externally swaged with crimping ferrules.

HDS OIL assemblies are tested at 1 1/2 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 or addition of laser etched SS tag, with manufacturer's name, nominal bore, the hose assembly serial number and the test date. The marking of hose assemblies is made in compliance with PED Directive (97/23/ CE). Full test certification can be supplied on request.

HDS OIL hoses can be supplied in the FIRETEC version with ADR selfextinguish CL1 cover.

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

Electrical continuity is achieved by the two wires bonded to the end fittings, this helps dissipate accumulated charge and to avoid static flash. The electric resistance of hose assemblies is less than 1 ohm/mt, as required by EN ISO 8031:2009 - 4.7.

Upon request it's possible to manufacture HDS hoses in accordance to the Directive 94/9/EC "ATEX", with a special outer antistatic black cover, ground connection cable, for explosive environment.

HDS OIL HD and OIL SD hoses are specially engineered for the transfer of hydrocarbons, including oil, petrol, diesel, lubricating oils, MTBE, paraffin and 100% aromatics, in all kinds of transfer. The range includes:

### OIL HD - HEAVY DUTY

Applications: Heavy Duty construction for the transfer of a wide variety of hydrocarbon conveyant under suction or pressure. Used for black oils and heavier lubricating products, Ship to Shore and Ship to Ship, Dockside and in general for the most arduous Industrial and Marine applications. Commonly used for all hose loading arms in Bottom Loading operations, thanks to the special reinforcement for minimal elongation. Fully suitable for 100% aromatics & MTBE transfer.

Construction: High strength polypropylene and polyester films and fabrics, high density polyethylene films reinforcement, includes in the construction an High Density UHMW PLT seamless tubular extruded film, to avoid any possible leak and guarantee a gas-tight construction, Polyvinyl coated polyester fabric cover, weather and ozone resistant Available in 40 mt coils from 3/4" to 8" and 25 mt length up to 12"

OIL HD hose assemblies are certified by D N V as complying the requirements of CE Directive 97/23 "PED" and are manufactured in accordance with the requirements of Paragraphs 2:12 and 5:7 of the IMO Chemical Carrier Code.

OIL HD hoses are Type approved by Lloyd's with Certificate n° 13/0002

### OIL SD - STANDARD DUTY

Applications : General purpose Standard Duty hose suitable for the safe transfer of a wide variety of hydrocarbons, including fuel oils, petrol, diesel, lubricating oils, kerosene, MTBE, and 100% aromatics under suction or pressure. Commonly used for road and rail tanker loading and discharging, storage tank and in-plant use. Suitable as flexible hose for Top Loading arms.

Available in 40 mt coils from 1 1/2" up to 8".

Construction: High strength polypropylene films and fabrics, high density polyethylene film reinforcements, Polivinyl coated polyester fabric cover, weather and ozone resistant.

OIL VAPOUR hose is also available on request, for low pressure vapour recovery



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

Size		Maximum W.P.		Safety factor	Bend Radius		Weight kg/m	Maximum Length	
mm	inch	Bar	P.S.I.		mm	inch		Mt.	Feet
20	3/4	15	200	5:1	75	3	0.73	40	132
25	1	15	200	5:1	100	4	0.9	40	132
32	1 1/4	15	200	5:1	125	5	1.27	40	132
40	1 1/2	15	200	5:1	140	5.6	1.49	40	132
50	2	15	200	5:1	180	7.2	2.18	40	132
65	2 1/2	15	200	5:1	220	8.8	3.09	40	132
75/80	3	15	200	5:1	280	11.2	3.66	40	132
100	4	15	200	5:1	400	16	5.26	40	132
150	6	15	200	5:1	550	22	11.9	40	132
200	8	15	200	5:1	800	32	15.65	40	132
250	10	15	200	5:1	1000	40	22.53	25	82
300	12	15	200	5:1	1200	48	31.78	25	82

STANDARD DUTY SUCTION & DISCHARGE HOSE EN 13765:2010 TYPE 2

Size		Maximum W.P.		Safety factor	Bend Radius		Weight kg/m	Maximum Length	
mm	inch	Bar	P.S.I.		mm	inch		Mt.	Feet
40	1 1/2	10	150	5:1	140	5.6	1.23	40	132
50	2	10	150	5:1	180	7.2	1.66	40	132
65	2 1/2	10	150	5:1	220	8.8	2.1	40	132
75/80	3	10	150	5:1	280	11.2	2.53	40	132
100	4	10	150	5:1	400	16	4.1	40	132
150	6	10	150	5:1	575	23	9.85	40	132
200	8	10	150	5:1	800	32	13.31	40	132

Oil Vapour hose also available, to EN 13765:2010 Type 1. 5 Bar working pressure.

# HDS Hoses Australia



Code	Oil HD ZZ	Oil HD ZX	Oil HD XX
Applications	HD Fuel/Oil/Liquid transfer		
Colour	Blue/Black		
Temperature	-40 +100°C		
Inner Wire	Galvanized Steel	Galvanized Steel	Stainless Steel
Outer Wire	Galvanized Steel	Stainless Steel	Stainless Steel

Code	Oil SD ZZ	Oil SD ZX	Oil SD XX
Applications	SD Fuel/Oil/Liquid transfer		
Colour	Blue		
Temperature	-30 +80°C		
Inner Wire	Galvanized Steel	Galvanized Steel	Stainless Steel
Outer Wire	Galvanized Steel	Stainless Steel	Stainless Steel

Aluminium Wire Also available



Certificate No.: 73Q14710

# HDS Hoses Australia

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### Quality Certificates

- EN 13765:2010, approved from CEN
- 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)
- AS1180.5-1999 (method 5)
- AS 1180.13B (Electrical resistance)
- AS1180.13C (Electrical continuity)

### Type Approval

Lloyd's Register Type Approved  
 RINA - Registro Italiano Navale

Russian Maritime Register of Shipping

### Welding Process

in according to EN 15608:2005 - EN 439:1996 - EN 15614-1:2005 - EN 6848:2005 - EN 12072:2001 and to ASME IX