

# ALS<sup>TM</sup>

By  LEE SENG

Industrial Hoses  
& Accessories that  
are tailor-made to  
your application

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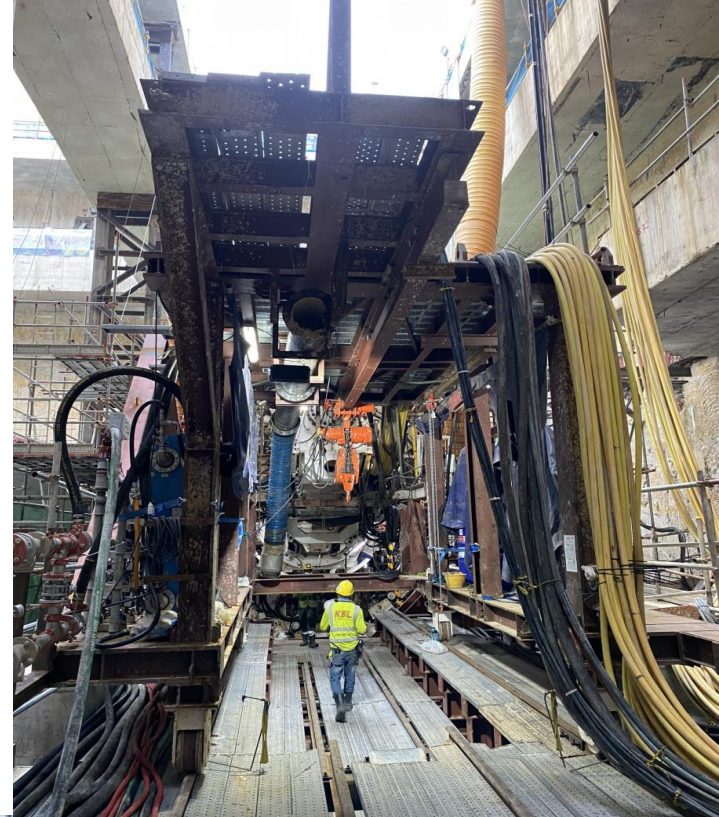






## Being Application Driven Is Our Motto

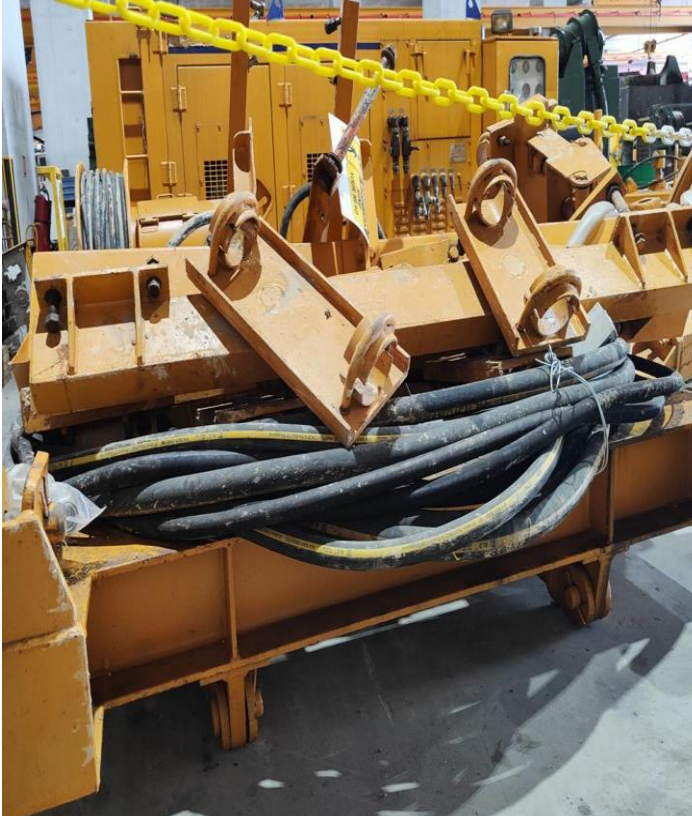
No two applications are alike, and similarly, no two hoses serve the same purpose. Whether it's transferring slurry in an underground tunneling project or handling ship-to-ship bunkering, our commitment to our motto drives us to thoroughly analyze your specific operation. We strongly believe that a comprehensive grasp of your operations leads to hose solutions that guarantee the longest possible lifespan.



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## Maximum Value Through Hose Longevity

Hoses are intricate products designed with multiple layers to match the working pressure, temperature, corrosion, and abrasion of different mediums transferred. We manage this complexity by drawing upon 55 years of experience in various industries and applications. Our deep knowledge of hose construction allows us to streamline material selection and develop an optimal hose crimping and swaging process.



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## Swift and decisive

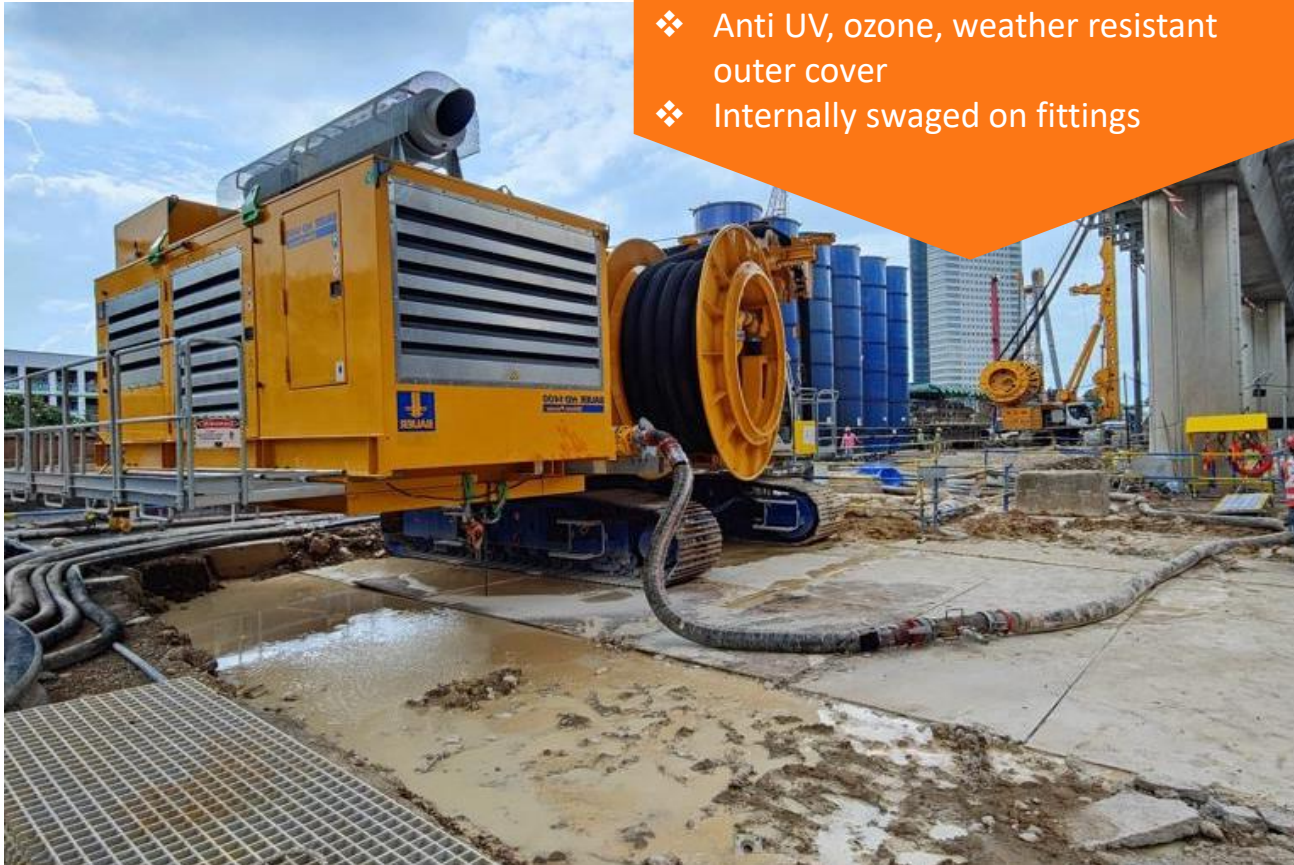
Our partnerships with numerous large-scale OEMs have allowed us to amass the most extensive inventory in the region in terms of both range and quantity. Additionally, our strong connections with various suppliers, along with our in-house resources and capabilities, ensure that we consistently deliver our products to end-users precisely when they need them.



Our ALS Hardwall Bulk Material hoses are specifically engineered to withstand extremely abrasive sedimentary rocks like granite, siltstones, quartzite, silt, norite, and more.

These hoses feature an inner liner made from a patented, highly durable rubber compound designed to resist abrasion. To enhance their longevity, we've increased the liner's thickness to more than 1.5 times the industry standard.

We offer these hoses in various pressure ratings to accommodate different transfer line needs. . The enhanced reinforcement wires and fibers plays a crucial role in reducing the risk of hose blowouts and damages due to blockages.

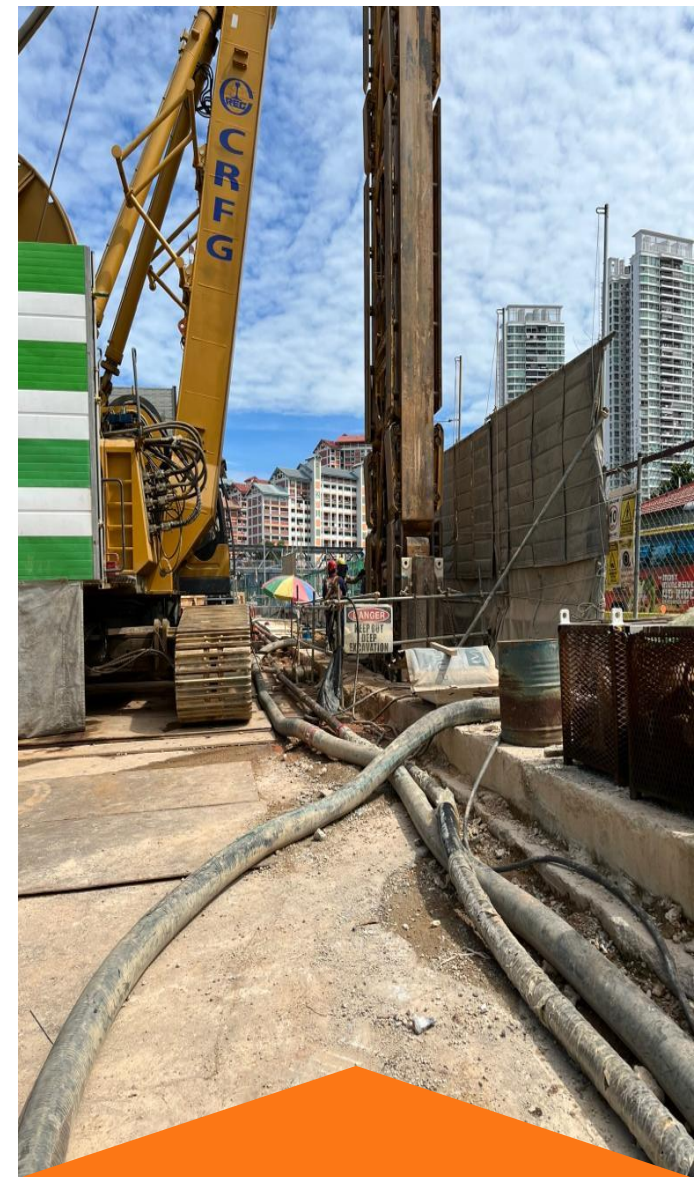


## ALS Hardwall Bulk Material Hose

For Bentonite/Slurry/Gravel/Sand/Cement

### Specifications

- ❖ 2" to 12" sizes
- ❖ 12, 21, or 85 Bar working pressure options
- ❖ Inner Tube: Anti abrasive Rubber Compound
- ❖ Increased inner tube thickness
- ❖ Anti UV, ozone, weather resistant outer cover
- ❖ Internally swaged on fittings



### Our ALS Bulk Material Advantages

- ❖ Thick anti abrasive inner liner for longevity
- ❖ Full internal flow to reduce clogging and increase flowrates
- ❖ Higher pressure ratings to reduce hose blowouts and whippings



# ALS Cement Pump Hose

## Specifications

- ❖ Sizes 5" and 6"
- ❖ 85 Bar working pressure, with 2:1 safety factor
- ❖ Meets ASME B30.27-2014
- ❖ Inner Tube: Smooth & ultra thick black conductive NR/SBR rubber with high abrasion characteristics
- ❖ Anti UV, ozone, weather resistant outer cover
- ❖ Internally swaged on full flow fittings
- ❖ Couplings: Victaulic, BSP, NPT, Shouldered, California, Schwing, Flanges etc.

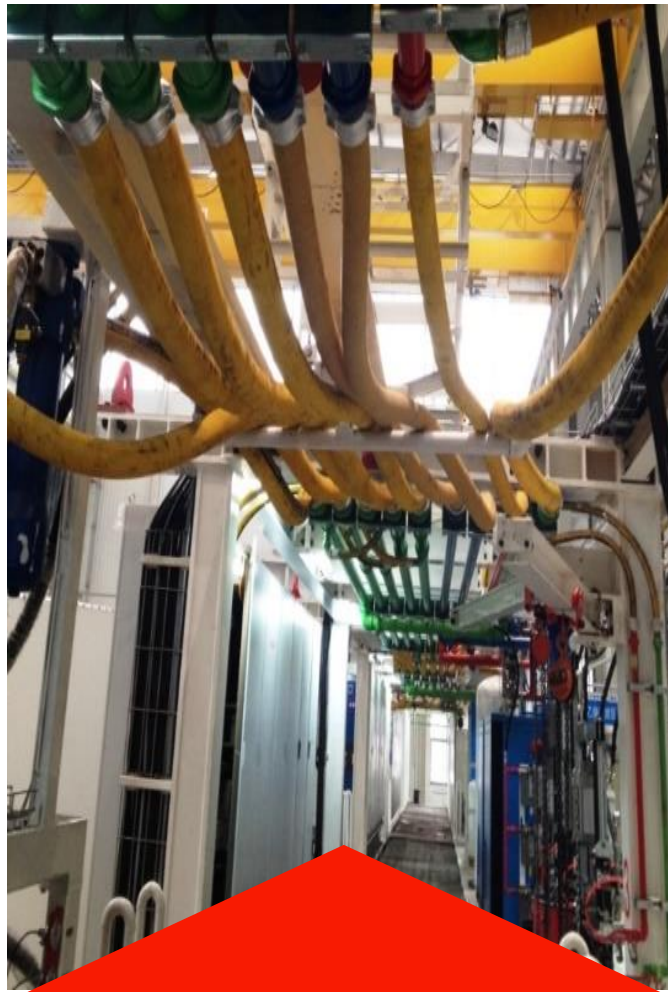


- ❖ **Patented rubber inner tube** compound that enhances material bonding and reduce degumming , thus doubling the abrasion characteristic.
- ❖ **Uniform tensioning of the reinforcement** with minimal tolerance for concentricity of the hose. Eliminates kinky and allows for maximum flexibility
- ❖ **Ultra thick anti abrasion outer cover** with a robust construction to withstand compressive loads.



## ALS Oil Suction & Discharge Dock Hose

- ❖ 1" to 12" sizes
- ❖ 12 or 21 bar working pressure options
- ❖ Application: For the transfer of petroleum products for oil road tankers, bunker oil barges etc.

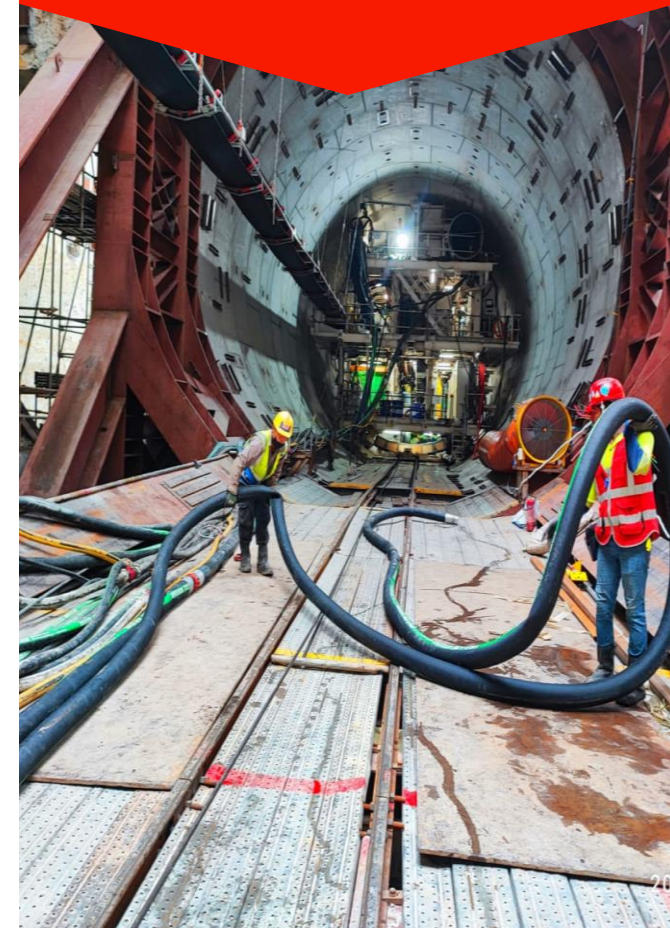


## ALS Air & Multipurpose Hose

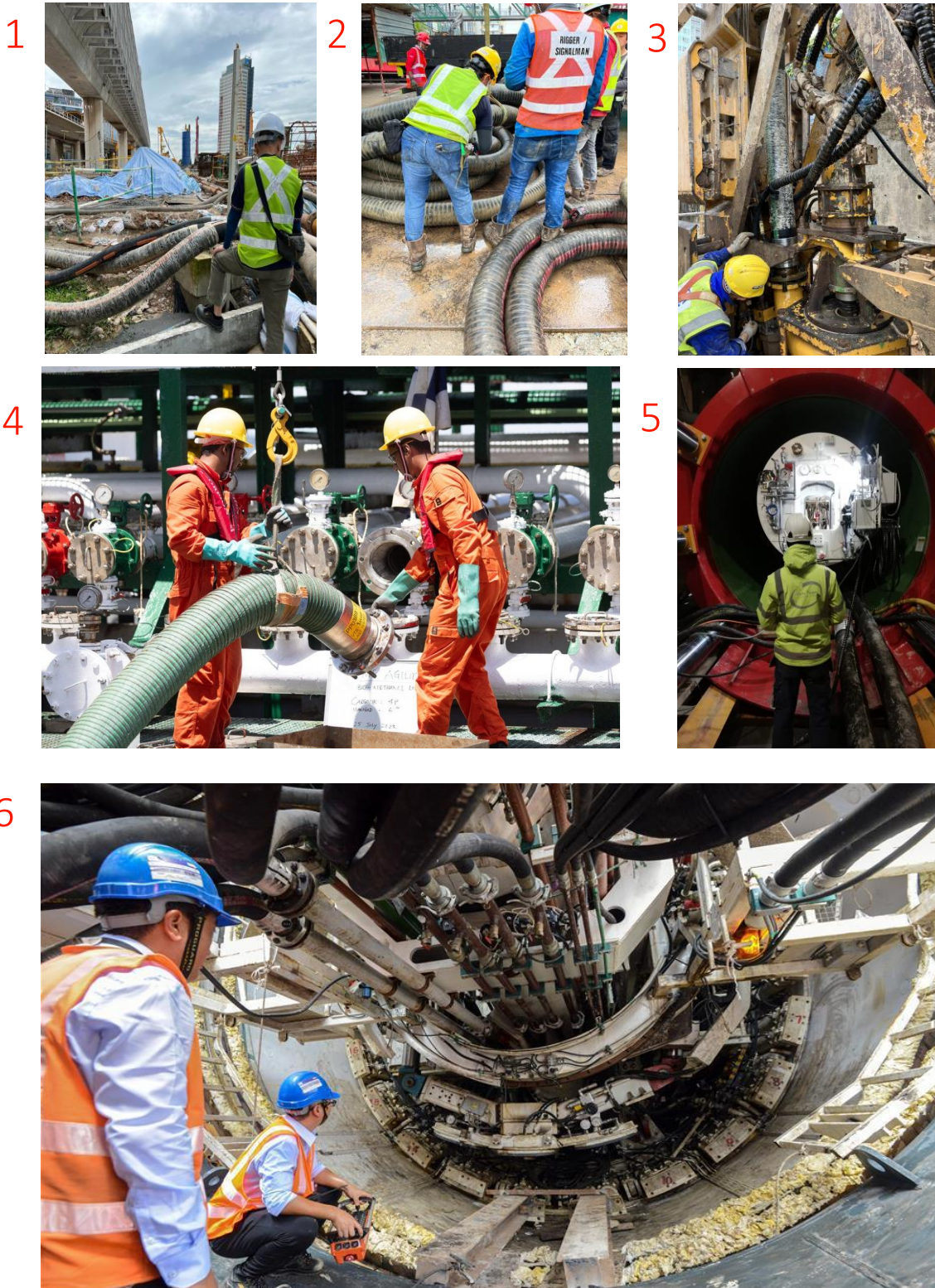
- ❖ 1" to 8" sizes
- ❖ 12 or 20 or 40 bar working pressure options
- ❖ Application: For the conveyance of water, compressed air, & inert gas for mining, construction, engineering, shipbuilding sector

## ALS Water Suction & Discharge Hose

- ❖ 1" to 12" sizes
- ❖ 12 bar working pressure
- ❖ Application: For the transfer of petroleum products for oil road tankers, bunker barges







# Our Approach

Practical Advice Based On 55 years of On-Site Experience

- 1 Complete redesign of heavy-duty bulk material transfer hoses' pressure and return lines for a dewatering project.
- 2 Providing a redesigned corrugated bulk material hose with reusable boss clamp coupling, enabling dredging companies to swiftly repair damaged hoses on-site.
- 3 Installation of a customized small bending radius corrugated bulk material hose for abrasive mediums for a construction company.
- 4 Supply of a high temperature composite hose for methanol with BV unit class certification for Ship-to-Ship transfer for a vessel.
- 5 Analyzing the course of failures for a series of hoses for the **TBM** tail end sealant system for a main contractor.
- 6 Witnessing of the successful routing and installation of industrial air, water, grout, and hydraulic hoses for a EPB machine for a hydraulics engineering company.



# Our Capabilities

At Lee Seng, we do believe that the hose secondary process requires a culture of perfectionism and ingenuity. As such, we have internalized every aspect of the hose assembly, fabrication, testing & certification, and packing processes.



## Custom Fabrication

- Welding
- Pipe and Tube Bending
- Lathe, Milling, and CNC Machining



## Testing and Certification

- Hydrostatic pressure test
- Electrical continuity
- Unit class certificate by IACS Class bodies



## Packing, Labelling and Transportation



## Hose Assembly

- External Crimp
- Internal Swage
- External Swage

Our hose crimping and swaging machines are at the core of our assembly process. With over 50 years of experience in hoses, we exclusively employ top-of-the-line hose assembly machinery from industry leaders such as Uniflex, OP, and Shand to achieve the ideal crimping results.

Additionally, we have the capability to conduct tests and furnish certification for hose assemblies, with the presence of class society bodies and our clients. These tests adhere to the most up-to-date EN, SAE, and ISO standards

# Besides Hose Assemblies, We Can Supply:



## HOSE FITTINGS

1. VICTAULIC
2. KING COMBINATION NIPPLES
3. HAMMER UNIONS
4. CAMLOCKS
5. BOSS COUPLING
6. SANDBLAST
7. STORZ
8. BAUER & MILLER
9. HOSE MENDERS

## PIPES/FLANGES/SPOOL

1. JIS B TYPE/ SCHEDULE PIPES
2. POLYURETHANE LINER PIPES
3. HDPE LINER PIPES
4. POLYURETHANE LINER PIPES
5. ANSI/PN/JIS FLANGES
6. Y-PIECE
7. REDUCER



## VALVES

1. KNIFE GATE VALVES
2. BALL VALVES
3. BUTTERFLY VALVES
4. GLOBE VALVES
5. CHECK VALVES
6. FLOW CONTROL VALVES
7. VALVE ACTUATORS
8. STRAINERS

## PIPE FITTINGS/ JOINTS

1. REDUCERS
2. ELBOW AND BENDS
3. THREADED AND GROOVE PIPE FITTINGS





*Partner Of  
Choice For  
Asia Pacific  
Companies*



## Countries Served

- Singapore
- Indonesia
- China
- Malaysia
- UAE
- South Korea
- Thailand
- Vietnam
- Myanmar
- Philippines
- Australia











# ALS Industrial Hose Catalogue

- ALS Slurry & Bulk Material Hose
- ALS Heavy Duty Slurry & Concrete Hose
- ALS Oil Suction & Delivery Hose
- ALS Chemical Suction & Delivery Hose
- ALS Water Suction & Delivery Hose
- ALS Air & Multipurpose Hose
- ALS Dredging Hose



# ALS™ Bulk Material/ Slurry Suction & Discharge 12 and 21 Bar



# Part No.	 ID		 OD	 Working Pressure		 Burst Pressure		 Minimum Bend Radius		 Weight
	Mm	inch	mm	Bar	PSI	Bars	Psi	inch	mm	Kg/m
ALS BM - 32	51	2"	65	12-21	175-305	36-93	525-1349	9	230	2.08
ALS BM - 48	76	3"	92	12-21	175-305	36-93	525-1349	14	360	3.28
ALS BM - 64	102	4"	120	12-21	175-305	36-93	525-1349	20	515	5.15
ALS BM- 80	127	5"	147	12-21	175-305	36-93	525-1349	26	675	6.76
ALS BM - 96	152	6"	177	12-21	175-305	36-93	525-1349	35	900	11.88
ALS BM – 128	203	8"	232	12-21	175-305	36-93	525-1349	47	1200	13.69
ALS BM - 160	254	10"	286	12-21	175-305	36-93	525-1349	63	1600	17.16

Bulk Material/  
Slurry

Petroleum

Chemical

Water

Multi-  
purpose/Air

Concrete

Dredging

- Tube:

Black anti-static inner tube designed to enhance wear resistance when transferring highly abrasive materials
- Reinforcement

High tensile textile synthetic yarn with steel helix wire and anti static copper wire
- Cover:

Oil resistant, weather and ozone resistant synthetic smooth rubber cover
- Temp. Range:

-40°C to 70°C
- Recommended For:

Dry materials suction and delivery hose specially designed for transfer of slurry, cement, gravel, feed etc.







Application and Markets





ALS<sup>TM</sup> Heavy Duty  
Slurry & Concrete Pump Hose  
85 Bars



# Part No.	 ID		 OD	 Working Pressure		 Burst Pressure		 Minimum Bend Radius		 Weight
	Mm	Inch	mm	Bar	PSI	Bars	Psi	inch	mm	Kg/m
ALS CP - 32	51	2"	75	85	1275	170	2465	15	380	3.87
ALS CP - 48	76	3"	100	85	1275	170	2465	15.8	400	5.42
ALS CP - 64	102	4"	128	85	1275	170	2465	21.7	550	7.66
ALS CP - 80	127	5"	153	85	1275	170	2465	27.6	700	9.44
ALS CP - 96	152	6"	184	85	1275	170	2465	29.92	760	13.60

Bulk Material/  
Slurry

Petroleum

Chemical

Water

Multi-  
purpose/Air

Concrete

Dredging

- Tube:

Smooth & ultra thick black conductive NR/SBR rubber with high abrasion characteristics arising from the transfer of sand, gravel, bentonite, feed, cement etc.
- Reinforcement

Multiple plies of steel wire cord, capable of withstanding suction and vacuum
- Cover:

Black and smooth wrapped ozone, weather and abrasion resistant cover that resist vibration, kinking, and elongation during operation
- Temp. Range:

-40°C to 80°C
- Recommended For:

Slurry & concrete pump and placement applications such as those onboard boom trucks, mixers, slurry units etc.
- Couplings

Victaulic, BSP, NPT, Shouldered, California, Schwing, Flanges etc.

Application and Markets





ALS™ Oil Delivery



# Part No.	ID		OD	Working Pressure		Burst Pressure		Minimum Bend Radius		Weight
	Mm	inch	mm	Bar	PSI	Bars	Psi	inch	mm	Kg/m
ALS OD - 16	25	1"	36	12	175	36	525	3.35	85	0.77
ALS OD - 20	32	1 ¼"	44	12	175	36	525	3.94	100	1.04
ALS OD - 24	38	1 ½"	50	12	175	36	525	4.92	125	1.26
ALS OD - 32	51	2"	64	12	175	36	525	7.87	200	1.78
ALS OD - 40	63	2 ½"	77	12	175	36	525	9.84	250	2.23
ALS OD - 48	76	3"	92	12	175	36	525	11.81	300	3.25
ALS OD - 64	102	4"	120	12	175	36	525	17.32	440	3.95
ALS OD - 80	127	5"	146	12	175	36	525	22.83	580	6.93
ALS OD - 96	152	6"	172	12	175	36	525	27.56	700	9.2
ALS OD - 112	203	8"	228	12	175	36	525	28.53	750	14.42

Bulk Material/  
Slurry

Petroleum

Chemical

Water

Multi-  
purpose/Air

Concrete

Dredging

- Tube:

Natural and synthetic rubber
- Reinforcement

High tensile textile synthetic yarn
- Cover:

Oil resistant, weather and ozone resistant synthetic rubber cover
- Temp. Range:

-40°C to 100°C
- Recommended For:

Transfer of oils and other petroleum products. Ideal for oilfield service truck, tank-truck, and fuel farm use.

Application and Markets






ALS™ Heavy Duty  
Oil Dock  
Suction & Discharge  
Hose  
EN1765:2015



Bulk Material/ Slurry
Petroleum
Chemical
Water
Multi- purpose/Air
Concrete
Dredging

<div>Part No.</div> <div></div>	ID		OD	Working Pressure		Burst Pressure		Minimum Bend Radius		Weight
	Mm	inch	mm	Bar	PSI	Bars	Psi	inch	mm	Kg/m
ALS OSD - 32	51	2"	64	21	305	84	1220	7.87	200	1.78
ALS OSD - 48	76	3"	92	21	305	84	1220	11.81	300	3.25
ALS OSD - 64	102	4"	120	21	305	84	1220	17.32	440	3.95
ALS OSD – 80	127	5"	146	21	305	84	1220	22.83	580	6.93
ALS OSD - 96	152	6"	172	20	290	80	1160	27.56	700	9.2
ALS OSD -128	203	8"	228	17	250	68	1000	28.53	760	14.42

Tube:	Oil Resistance NBR, black, smooth. Suitable for aromatic content up to 50%
Reinforcement	High tensile textile cords with embedded steel helix wire
Cover:	Oil resistant, weather, abrasion and ozone resistant synthetic rubber cover
Temp. Range & Safety Factory:	-40°C to 100°C, Safety Factor: 4:1
Recommended For:	Transfer of oils and other petroleum products. Ideal for bunkering, ship loading, oilfield service truck, tank-truck, and fuel farm use. Manufactured in accordance to EN1765:2016 type S15. Do specify if electrically continuous or discontinuous hose is required



# ALS™ Chemical Heavy Duty Suction & Discharge UHMWPE Hose



# Part No.	ID		OD	Working Pressure		Burst Pressure		Minimum Bend Radius		Weight
	Mm	inch	mm	Bar	PSI	Bars	Psi	inch	mm	Kg/m
ALS CSD - 12	19	3/4"	31	16	233	64	932	3.27	80	0.67
ALS CSD - 16	25	1"	37	16	233	64	932	4.49	110	0.81
ALS CSD - 20	32	1 ¼"	45	16	233	64	932	6.73	165	1.12
ALS CSD - 24	38	1 ½"	52	16	233	64	932	9.18	225	1.46
ALS CSD - 32	51	2"	67	16	233	64	932	14.29	350	2.26
ALS CSD - 48	76	3"	80	16	233	64	932	18.37	450	2.82
ALS CSD - 64	102	4"	93	16	233	64	932	32.65	800	3.42
ALS CSD – 96	152	6"	120	16	233	64	932	48.98	1200	5.29
ALS CSD – 112	203	8"	31	16	233	64	932	53.27	1353	7.28

Bulk Material/  
Slurry

Petroleum

Chemical

Water

Multi-  
purpose/Air

Concrete

Dredging

- Tube:

Chemical resistant UHMW-PE
- Reinforcement

High tensile textile synthetic yarn and steel helix wire
- Cover:

Oil resistant, weather and ozone resistant synthetic rubber cover
- Temp. Range:

-40°C to 80°C
- Recommended For:

Transfer of chemicals that does not affect the UHMWPE inner tube. Ideal for chemical process plants, bulk loading and unloading, tank-truck transfers, and internal transfers .

Application and Markets





Water

# ALS™ Water Suction & Discharge Hose



# Part No.	ID		OD	Working Pressure		Burst Pressure		Minimum Bend Radius		Weight
	Mm	inch	mm	Bar	PSI	Bars	Psi	inch	mm	Kg/m
ALS WSD - 12	19	3/4"	31	12	150	36	450	3.27	80	0.67
ALS WSD - 16	25	1"	37	12	150	36	450	4.49	110	0.81
ALS WSD - 20	32	1 ¼"	45	12	150	36	450	6.73	165	1.12
ALS WSD - 24	38	1 ½"	51	12	150	36	450	9.18	225	1.46
ALS WSD - 32	51	2"	64	12	150	36	450	14.29	350	2.26
ALS WSD - 48	76	3"	91	12	150	36	450	18.37	450	2.82
ALS WSD - 64	102	4"	120	12	150	36	450	32.65	800	3.42
ALS WSD-80	127	5"	146	12	150	36	450	41.27	1050	4.57
ALS WSD – 96	152	6"	172	12	150	36	450	48.98	1200	5.29
ALS WSD – 112	203	8"	225	12	150	36	450	53.27	1350	7.67

Bulk Material/  
Slurry

Petroleum

Chemical

Water

Multi-  
purpose/Air

Concrete

Dredging

- Tube:

Black smooth natural and synthetic rubber compound
- Reinforcement

High tensile textile synthetic yarn and steel helix wire
- Cover:

Oil resistant, weather and ozone resistant synthetic rubber cover
- Temp. Range:

-30°C to 80°C
- Recommended For:

Designed for the suction 7 discharge of water and non-corrosive fluids. Ideal for high pressure discharge for rugged and tough operating conditions.

Application and Markets





# ALS™ Air & Multipurpose Hose



# Part No.	ID		OD	Working Pressure		Burst Pressure		Minimum Bend Radius		Weight
	Mm	inch	mm	Bar	PSI	Bars	Psi	inch	mm	Kg/m
ALS AH-4	6	¼"	14	20	300	60	900	1.89	48	0.15
ALS AH-5	8	5/16"	16	20	300	60	900	2.52	64	0.18
ALS AH-6	10	3/8 "	18	20	300	60	900	3.15	80	0.21
ALS AH-8	12	½"	22	20	300	60	900	4.09	104	0.22
ALS AH-12	19	¾"	30	20	300	60	900	7.48	190	0.65
ALS AH-16	25	1"	37	20	300	60	900	9.84	250	0.81
ALS AH-20	32	1 ¼"	45	20	300	60	900	12.60	320	0.85
ALS AH-24	38	1 ½"	52	20	300	60	900	14.96	380	1.30
ALS AH-32	51	2"	65	20	300	60	900	20.08	510	1.88
ALS AH-40	63	2 ½ "	79	20	300	60	900	24.80	630	2.26

Bulk Material/  
Slurry

Petroleum

Chemical

Water

Multi-  
purpose/Air

Concrete

Dredging

Tube Synthetic Rubber

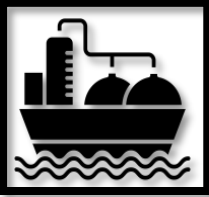
Reinforcement Multi layers high tensile textile plies

Cover: Oil resistant, weather and ozone resistant synthetic rubber cover

Temp. Range: -40°C to 70°C

Recommended For: Transfer for the conveyance of water, compressed air, & inert gas for mining, construction, engineering, shipbuilding sectors etc.

Application and Markets





ALS<sup>TM</sup> Air & Multipurpose  
Hose



# Part No.	ID		OD	Working Pressure		Burst Pressure		Minimum Bend Radius		Weight
	Mm	inch	mm	Bar	PSI	Bars	Psi	inch	mm	Kg/m
ALS AH - 48	3	76	91	20	300	60	900	29.92	760	2.89
ALS AH - 56	3 ½ "	89	106	20	300	60	900	36.02	915	3.87
ALS AH - 64	4"	102	120	20	300	60	900	40.16	1020.	4.21

Bulk Material/  
Slurry

Petroleum

Chemical

Water

Multi-  
purpose/Air

Concrete

Dredging

Tube	Synthetic Rubber
Reinforcement	Multi layers high tensile textile plies
Cover:	Oil resistant, weather and ozone resistant synthetic rubber cover
Temp. Range:	-40°C to 70°C
Recommended For:	Transfer for the conveyance of water, compressed air & inert gas for mining, construction, engineering, shipbuilding sectors etc.






Application and Markets





# ALS<sup>TM</sup> Marine Dredging Hose



# Part No.	 ID		 Inner Tube Thickness	 Working Pressure	 Burst Pressure	 Approx. Weight
	Mm	inch	mm	Bar	Bars	Kg/m
ALS DRG - 300	300	12	10-15	3 to 21 options	9 to 63	33.41
ALS DRG - 400	400	16	10-15	3 to 21 options	9 to 63	57.12
ALS DRG - 450	450	18	10-15	3 to 21 options	9 to 63	60.19
ALS DRG - 500	500	20	10-15	3 to 21 options	9 to 63	68.27
ALS DRG - 550	550	22	10-15	3 to 21 options	9 to 63	73.60

Material/ Slurry
Petroleum
Chemical
Water
Multi- purpose/Air
Concrete
Dredging

Inner Tube:	Smooth ultra anti-abrasive synthetic rubber (a compound blend of NR, BR and SBR) with high tensile breaker plies coated with synthetic rubber. This inner tube is designed to handle a combination of sand, gravel, seawater, slurry and any abrasive mediums. The smooth design ensures full flow to minimise blockages & vibration, and increased flowrates.
Reinforcement	High tensile fabric with embedded high tensile steel inner wire coils that enhances the hose’s kink, load and crush resistance capabilities.
Cover:	High grade synthetic (NR and CR) rubber resistant to abrasion, sea water, ozone, and oil.
Temp. Range:	-20°C to 80°C
Recommended For:	The transfer of abrasive mediums such as sand, gravel, seawater, slurry etc. onboard dredging vessels involved in river, harbour, sea, and land reclamation.