➡ CUSTOM END FITTINGS
 ➡ CUSTOMISED CONSTRUCTION
 ➡ STRONG + DURABLE
 ➡ EFFICIENT + ECONOMICAL

# **COMPOSITE HOSES**







# WHY PLASCORP?

For 60+ years we've manufactured and supplied composite hoses, ducting, PVC pipes plus mine ventilation and steel reinforcing to various industries in Australia. But our biggest plus, is our ability to customise and tailor solutions to solve our customers' challenges.

### **OUR RANGE**

Petrol Hose Range	4-6
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Plascorp is one of Australia's leading privately owned manufacturing and distribution companies. We have invested significantly in quality European equipment to maximise manufacturing efficiency and enable valueadd products to be produced for customers, expanding our operations in Melbourne, Sydney, Brisbane and Perth.

The company draws from years of experience in the aviation, petrochemical, construction, civil infrastructure and mining industries to produce custom or 'made to order' designs and product solutions that best meet our customer's specification requirements. Our superior service support includes working closely with our customers from planning stage through to a project's completion. We have a network of dedicated and client-focused sales teams and branches across all major cities.

### PRODUCTS YOU CAN TRUST

All our products are manufactured to the relevant Australian Standards and tested under strict quality control procedures. We hold numerous standards licences. Plascorp manufacturing is approved and certified in accordance with ISO 9001.

We have been manufacturing thermoplastic composite hoses for over 50 years. Our composite hose range is predominately used with suction and delivery of petroleumbased products, chemicals, acids and alkalis. Applications include chemical process plants, transport tankers, refineries and other industrial applications. Products are available through an extensive distribution network.

Local manufacturing enables us to have control over our production capabilities ensuring a consistent product to meet our clients' needs. It also provides the flexibility to customise products and to ensure we can meet the most challenging deadlines for each project.





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### TAILOR MADE COMPOSITE HOSES

When it comes to composite hoses, understanding the chemistry of the proposed use is important to ensure the correct materials are used for performance and longevity.

### **COMPOSITE HOSE BENEFITS**

Plascorp composite hoses consist of various layers encapsulated between internal and external spiral wire helixes.

The application and pressure rating of the hose dictates the composition, number of layers and the type of wire. The unique wire helixes deliver the pressure handling characteristics and a tough PVC coated fabric forms the outer cover.

Our composite hose construction results in a light and flexible hose with a relatively short bend radius which is suitable for a wide variety of uses.

### **KEY BENEFITS INCLUDE:**

- Customised end fittings
- Customise construction to chemistry requirements
- ${\boldsymbol \cdot}$  Wire helix construction adds strength & durability
- Efficient & economical
- Durable high-strength outer material
- Good puncture & abrasion resistance



Our Petrol Hose AS 2683-2000 range is designed and manufactured specifically for the demands of the petro-chemical industry. The polypropylene film and fabric construction handles hydrocarbon-based products. The internal and external wire helix wires deliver the pressure handling characteristics and a tough PVC-coated fabric forms the outer cover.

Description	Code	Туре	Conforming	Grade	Elec		l	Max work	ting pres	sure (kPa	ı @ ambi	ent temp	)	
			Standard		Kind	3/4	1	11/4	11/2	2	2 1/2	3	4	6
<b>Petrol Hose STD</b> Green with reflective yellow stripe	1000	1	AS 2683-2000	3	1	*	700	700	700	700	700	700	700	700
<b>Petrol Hose HD</b> Black with no stripe	901	1	AS 2683-2000	3	1	-	1400	1400	1400	1400	1000	1000	1000	1000
<b>Petrol Hose LW</b> Yellow with reflective green stripe	1003	1	AS 2683-2000	3	1	-	-	-	-	600	500	500	400	*
Aviation Hose Black with green stripe	AVA	1	AS 2683-2000	3	1	*	*	*	700	700	*	700	700	*
Vapour Recovery Hose Black with yellow stripe	VRH	1	AS 2683-2000	3	1	-	-	-	-	*	*	*	400	*
Hot Bitumen White with no stripe	966	2	AS 2475	2	1	700	700	700	700	600	500	500	-	-

Type 1 hose is designed for suction and discharge and to be non-collapsible. Type 2 hose is designed for discharge only and to be non-collapsible.

Grade refers to the hose suitability to handle aromatic hydrocarbon content.

Grade 1 hose is suitable for fuels containing up to 30% aromatic hydrocarbon content.

Grade 2 hose is suitable for fuels containing up to 50% aromatic hydrocarbon content. Grade 3 hose is suitable for fuels containing over 50% aromatic hydrocarbon content. Kind 1 hose has an electrical resistance not greater than 1.0 ohm/m \*Hoses and test pressures available on request.

# PETROL COMPOSITE HOSE STANDARD / Type 1 / Grade 3 / Kind 1 - CODE 1000



Colour: Green with yellow stripe Temperature Range: -30°C to +80°C Internal wire: Galvanised steel External wire: Galvanised steel Applications: Lightweight, flexible hose designed for suction and delivery of petroleum-based products. Suitable for road and rail tankers.

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
1	25	32	60	700	0.8	20
11/4	32	38	75	700	1	20
11/2	39	48	75	700	1.3	20
2	51	63	90	700	1.6	20
21/2	63	75	100	700	2.4	20
3	76	90	125	700	2.8	20
4	102	112	200	700	4.1	20
6	152	170	400	700	7.8	to order

# PETROL COMPOSITE HOSE HEAVY DUTY / Type 1 / Grade 3 / Kind 1 - CODE 901



### AS 2683-2000

Temperature Range: -30°C to +80°C Internal wire: Galvanised steel External wire: Galvanised steel Applications: Used for ship to shore and general-purpose heavy-duty applications conveying petroleum products. Suitable for heavy-duty discharge for road and rail tankers, docks, ship to shore.

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
1	25	35	100	1400	0.9	20
11/4	32	42	125	1400	1.3	20
11/2	39	50	140	1400	1.5	20
2	51	65	170	1400	1.9	20
2 1/2	63	76	200	1000	3	20
3	76	90	270	1000	3.4	20
4	102	120	340	1000	6.5	20
6	152	180	700	1000	12.4	to order

## PETROL COMPOSITE HOSE LIGHTWEIGHT / Type 1 / Grade 3 / Kind 1 - CODE 1003



### AS 2683-2000

Colour: Yellow with green stripe Temperature Range: -30°C to +80°C nternal wire: Aluminium External wire: Galvanised steel Applications: Super-lightweight hose for suctions and delivery of petroleum-based products where ease of handling is paramount.

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
2	51	63	90	600	1.25	20
21/2	63	75	100	500	1.75	20
3	76	90	125	500	2	20
4	102	112	200	400	2.5	20

# AVIATION HOSE / Type 1/ Grade 3 / Kind 1 - CODE AVA



### AS 2683-2000

Colour: Black with green stripe Temperature Range: -30°C to +80°C Internal wire: Stainless steel External wire: Galvanised steel Applications: Specially designed for the suction and delivery of aviation fuel.

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
11/2	39	48	75	700	1.3	20
2	51	63	90	600	1.6	20
3	76	90	125	500	2.8	20
4	102	112	200	400	4.1	20

# VAPOUR RECOVERY HOSE / Type 1 / Grade 3 / Kind 1 - CODE VRH



### AS 2683-2000

Colour: Black with yellow stripe Temperature Range: -30°C to +80°C Internal wire: Galvanised steel External wire: Galvanised steel Applications: Suitable for the collection or transfer of hydrocarbon vapours within the petroleum industry.

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
4	102	112	200	400	4.1	20
4	102	112	200	400	4.1	30

### HOT BITUMEN HOSE / Type 2 / Grade 2 / Kind 1 - CODE 966



AS 2475-1001 Colour: White Temperature Range: -30°C to +180°C Internal wire: Galvanised steel External wire: Stainless steel Applications: Made from polyester film and fabric designed for high-temperature operation, this hose is ideal for the transfer of hot bitumen via gravity, suction or pressure. This hose is suitable for use with bitumen up to 180°C. It is ideally suited for road tanker loading and discharge, in plant transfer, spraying and spray bar applications. This hose is also suitable for conveying high aromatic content fuels.

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
3/4	19	28	125	700	0.8	20
1	25	35	125	700	0.9	20
11/4	32	43	130	700	1	20
11/2	39	50	150	700	1.5	20
2	51	68	200	600	2	20
21/2	63	78	250	500	2.8	20
3	76	90	280	500	3.5	20
4	102	112	200	400	4.1	20

Note: This hose is not recommended for use close to direct external radiant heat as the cover is not flame-retardant. Hoses should be flushed with diesel or kerosene after use. Cleaning with steam or direct external heat is not recommended.



# CHEMICAL HOSE RANGE AS 2594-1983

Our Chemical Hose AS 2594-1983 range is suitable for the suction and delivery of a wide range of chemicals. Constructed of polypropylene films and fabrics, the hoses are resistant to most acids, alkalis and solvents. Internal and external helix wires bind the hose together and deliver superior pressure handling. A tough PVC-coated fabric cover forms the outer cover for durability.

Depending on chemical resistance requirements and the material being conveyed, different internal and external wire combinations are available. Please consult with us for compatibility.

Description	Code	Туре	Conforming		١	1ax worki	ng pressu	re (kPa @	ambient	temp) inc	h	
			Standard	3/4	1	11/4	11/2	2	2 1/2	3	4	6
<b>Chemical Hose STD</b> Grey with red stripe		1	AS 2594-1983	*	1400	1400	1400	1200	1000	1000	1000	-
<b>Chemical Hose SSW</b> Grey with blue stripe		1	AS 2594-1983	*	1400	1400	1400	1200	1000	1000	1000	-
<b>Chemical Hose CS</b> Orange		1	AS 2594-1983	*	1400	1400	1400	1200	1000	1000	1000	1000
<b>Chemical Hose ASS</b> Orange with blue stripe		l	AS 2594-1983	*	1400	1400	1400	1200	1000	1000	1000	1000
<b>Chemical Hose PTSS</b> Red with white stripe		1	AS 2594-1983	-	*	-	*	1200	*	1000	1000	*

Type 1 hose is designed for suction and discharge and to be non-collapsible.

\* Hoses and test pressures available on request.

# CHEMICAL COMPOSITE HOSE STANDARD / Type 1 - CODE 951



AS 2594-1983

Colour: Grey with red stripe Temperature Range: -30°C to +100°C Internal wire: PP-coated galvanised steel External wire: Galvanised steel

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
]	25	38	100	1400	0.9	20
11/4	32	45	125	1400	1.3	20
11/2	39	50	140	1400	1.5	20
2	51	65	170	1200	1.8	20
21/2	63	78	200	1000	2.7	20
3	76	92	270	1000	3.3	20
4	102	120	340	1000	6.3	20

# CHEMICAL COMPOSITE HOSE SSW / Type 1 - CODE 952



### AS 2594-1983

Colour: Grey with blue stripe Temperature Range: - 30°C to +100°C Internal wire: PP coated galvanised stee External wire: Stainless steel

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
]	25	38	100	1400	0.9	20
11/4	32	45	125	1400	1.3	20
11/2	39	50	140	1400	1.5	20
2	51	65	170	1200	1.8	20
21/2	63	78	200	1000	2.7	20
3	76	92	270	1000	3.3	20
4	102	120	340	1000	6.3	20

# CHEMICAL COMPOSITE HOSE CS / Type 1 - CODE 969



AS 2594-1983

Temperature Range: - 30°C to +100°C Internal wire: Stainless steel External wire: Galvanized steel

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
]	25	38	100	1400	0.9	20
11/4	32	45	125	1400	1.3	20
11/2	39	50	140	1400	1.5	20
2	51	65	170	1200	1.8	20
21/2	63	78	200	1000	2.7	20
3	76	92	270	1000	3.3	20
4	102	120	340	1000	6.3	20
6	152	180	700	1000	12.4	to order

# **ROPE LAGGING**

All hoses can be supplied with polypropylene rope lagging. It is necessary to specify at time of ordering. Lagging insulates and protects the hose from abrasion but doubles the bend radius of the hose.

NOM Inches	NOM Diameter (mm)	Rope Diameter (mm)
1	25	8
11/4	32	8
11/2	39	8
2	51	8
2 1/2	63	10
3	76	10
4	102	10
6	152	12

# CHEMICAL COMPOSITE HOSE / Type 1 - CODE ASS



### AS 2594-1983

Colour: Orange with Blue Stripe Temperature Range: - 30°C to +100°C Internal wire: Stainless steel External wire: Stainless steel

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
1	25	38	100	1400	0.9	20
11/2	39	50	140	1400	1.5	20
2	51	65	170	1200	1.8	20
21/2	63	78	200	1000	2.7	20
3	76	92	270	1000	3.3	20
4	100	120	340	1000	6.3	20
6	152	180	700	1000	12.4	to order

# CHEMICAL COMPOSITE HOSE PTSS / Type 1 - CODE 2200



### AS 2594-1983

Colour: Red with white stripe Temperature Range: - 30°C to +100°C Internal wire: Stainless steel External wire: Stainless steel Applications: PTFE lined for increased resistance to aggressive chemicals. Heavy duty (Code 2201) and lightweight (Code 2203) available upon request.

NOM Inches	ID (mm)	OD (mm)	Min. Bend Radius (mm)	Working Pressure kPa at 20°C	Weight (kg/m)	Coil Length (m)
2	51	65	175	1400	1.85	20
3	76	92	300	1400	4.15	20
4	102	120	350	1400	4.8	20

### **INCORRECT & CORRECT USAGE**













# COMPOSITE HOSE ASSEMBLY TESTING

All hose assemblies are hydrostatically pressure and electrically tested in accordance with standards AS2683/AS2594 and AS1180.

It is recommended that composite hose assemblies be hydrostatically tested at least once every 12 months and electrically tested every 6 months in accordance with the appropriate standards for the hose.

For hose assemblies where there is a difference in pressure rating between hose and end couplings, the maximum working pressure of the assembly will be based on the lowest rated component. For instance, if the hose has a pressure rating of 1000kPa and the end couplings have a pressure rating of 700kPa, the maximum working pressure of hose assembly will be 700kPa. This assembly will be hydrostatically tested in accordance with the relevant standards with a max working pressure of 700kPa.

All assemblies will have a hose tag attached for proof of testing



# PRESSURE LOSS FLOW CHART



### For open end flow

- Maximum obtainable Petrol Codes 1000 & 1003
- Maximum on Petrol Code 901
   & Chemical Codes 951/952/969

### TAILORED SOLUTIONS+

# + PVC PIPES + STEEL REO + COMPOSITE HOSES + VENTILATION + DUCTING

For 6O+ years we've manufactured and supplied PVC pipes plus composite hoses, steel reo, ventilation and ducting to various industries in Australia. But our biggest plus, is our ability to customise and tailor solutions to solve our customers' challenges.

- Range of sizes and custom colours and lengths available
- Fabricating steel to tight tolerances
- Custom slotting and threading
- Ability to fully customise to meet needs



### TAILORED SOLUTIONS+



For 60+ years we've manufactured and supplied PVC pipes plus composite hoses, ventilation and ducting to various industries. But our biggest plus, is our ability to customise and tailor solutions to solve our customers' challenges.

We started manufacturing PVC Pipes and flexible ducting in the late 1950's. Our current head office and manufacturing centre in Melbourne, commenced operations in 1961 and has since grown to over three hectares. It accommodates our ever-evolving manufacturing and product tailoring capabilities.

In addition to our Australian customer base, we now supply a range of products in New Zealand, South East Asia, South Africa and the Middle East.

Our parent company, Geofabrics has branches throughout Australia, New Zealand, Papua New Guinea and the Pacific so can deliver product where you need it, when you need it, while providing local expertise to support your project.

45 Chambers Rd ALTONA NORTH VIC 3025

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35a Berger St SOUTH WINDSOR NSW 2756

103 Bancroft Rd PINKENBA QLD 4008

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32 Clune St BASSENDEAN WA 6054

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19 Druces Rd WIRI AUCKLAND NZ 2104

### Visit plascorp.com.au or call 1300 30 13 13

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