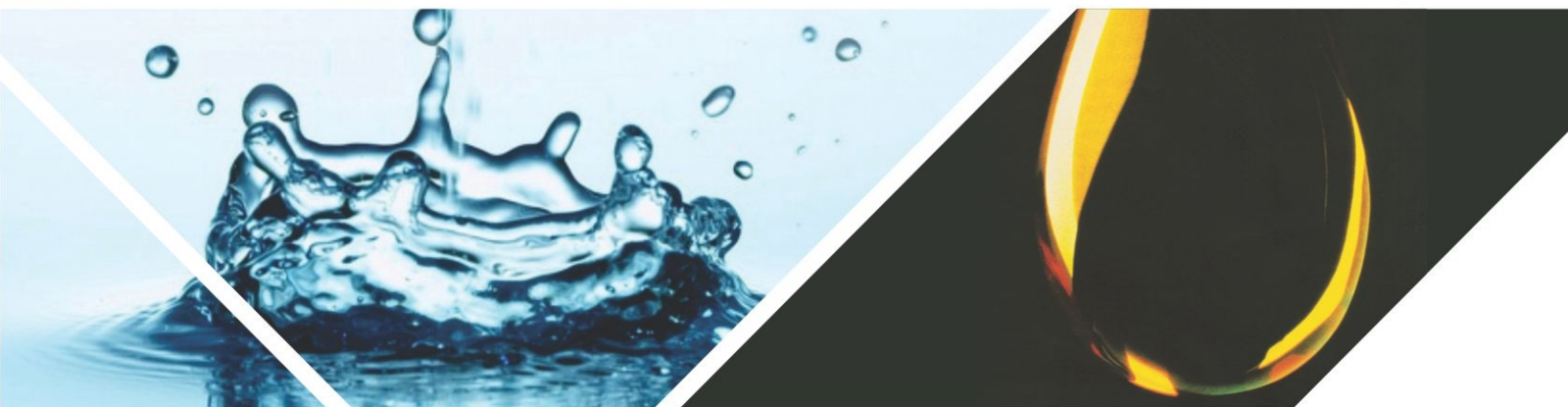




Gates India Pvt. Ltd., a subsidiary of Gates Corporation, is manufacturing world-class Hydraulic and Industrial Hoses at its state-of-the-art facility near Chandigarh. India's most advanced hose maker, Gates India has built its reputation by living up to its Quality Commitment "Gates India is committed to anticipate, meet or exceed our customers' expectations with products, services and experiences that are superior to competition". Gates' stringent quality practices ensure that each 'Made in India' Hose meets the industry's highest standards and qualifies as Gates Global Hydraulic Hose. Our products are exported to various locations in all 5 continents.

Gates Corporation, a subsidiary of Tomkins Plc, U.K. was established in 1911 and is headquartered in Denver, Colorado, U.S.A. Gates is the only non-tire rubber company with sales and manufacturing operations across 5 continents and is world's most trusted name in Hose & Connectors.

Gates India's clientele is spread across various segments: Construction & Heavy Equipment Manufacturers, Mining Sector, Indian Railways, ONGC & Oil PSUs, Steel and Cement Manufacturers. Our customers include Global OEMs like JCB, Caterpillar, Inductotherm and major Indian Players like Eimco, Ashok Leyland, Midco, etc.



Authorised Dealer

For more information on Gates Industrial Hose or to locate an Authorized Gates Dealer near you, Please contact Gates Customer Care or your nearest Gates Representative.



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POWERING PROGRESS™

INDUSTRIAL HOSE APPLICATION GUIDE

THE VALUE CONNECTION

RIGHT HOSE, RIGHT APPLICATION, RIGHT PRICE

Gates lineup of high quality, well-designed, constantly improving, robust industrial hoses meet the demanding requirements of today's diverse range of industrial applications. Durability and flexibility are built in. A variety of tube and cover materials, reinforcement, colors, and hose designs provide the choices you need to select the right hose for your application. Whether your transfer job involves liquids, solids, or gases, discharge or suction, low or high pressure, you can always count on Gates Industrial Hoses for optimal performance at a competitive price. We are The Value Connection.

GET GATES CONNECTED™ FOR QUALITY HOSE AND MORE

Connect with Gates and get the best support in the business including: application assistance, expert local field sales assistance, troubleshooting help, an industry-leading safety program and an outstanding distribution network. To assist in choosing the right hose assembly, and tips on hose selection, safety, increasing hose life, minimizing downtime, and reducing costly repairs, please contact your Gates Representative. Gates Connected is all geared to providing the knowledge, service and value you need to get the most for your money spent. That's what it means to be Gates Connected!

Warning: All Industrial Hose assemblies have a limited life on a given application. Assuming the correct hose has been selected, this can be adversely affected by factors including external abuse, excessive pressures, high temperatures, misapplication, and internal abrasion. Should a hose assembly fail during use, serious injury or destruction of property could result from propelled couplings, whipping hose, high pressure or high velocity discharge, chemical contact, high temperature materials, explosion, or fire. Contact Gates Product Application for assistance and hose recommendations on specific applications.

HOSE MAINTENANCE

Good maintenance results in longer life and safe working environment. Given below are few tips:

- Never exceed pressure rating of a hose.
- Never allow excessive pressure spikes or surges above a hose's maximum rated working pressure
- Never run over hose with equipment or vehicles such as forklifts.
- Do not pull a hose by its coupling. It can lead to a dangerous failure.
- Never lift a heavy, large-diameter hose by the middle with ends hanging down. This can damage the hose's internal reinforcement.
- Support large-dia hoses, every 10 feet (approx.) with

slings or rope saddles.

- Where hose is exposed to excessive wear in one spot, add an extra protective cover, such as nylon sleeve, or a pad.
- Any hose that has been mishandled, must be re-inspected and should pass a pressure test before its re-installation.
- All hoses should be visually inspected and pressure tested regularly. This is specially important for hoses in critical applications, such as acid/chemical, steam and petroleum.
- Check for coupling seepage and coupling slippage frequently.

GENERAL TIPS FOR HOSES

STORAGE

If you want your hose to last 10 years and more, here are some tips:

- Store hose in cool, dry rooms.
- Store them away from direct sunlight and heat vents.
- Keep them away from arc welders and other electrical equipment.
- Do not open hoses from original wrapping till you actually need them.
- If the hose ends are plugged when shipped, do not unplug them till ready for installation (to keep the inside of hose clean)
- Temperature - Hose should be stored in a cool, dry area never exceeding +38 C (+100 F). If stored below freezing, pre-warming may be required prior to handling, testing and placing into service.
- Do not hang coiled hose on a hook.
- Hose shipped straight should be stored straight.
- Open the packing carefully when using knives or sharp tools.

COUPLINGS













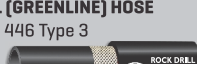
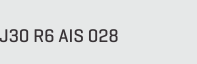
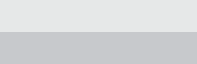



- Different types of couplings need to be used for different hoses for the sake of human safety and hose assembly life.

- Use proper size couplings and install them correctly.
- Use approved couplings for steam, LP Gas, Corrosive chemicals and petroleum products.
- If the coupling comes in contact with flammable material, make sure it is made of non-sparking material such as brass or aluminium.
- Before installing couplings check them for burrs or sharp edges.
- Make sure the hose ends are cut square before installing the couplings.
- Avoid oil based and permanent lubricant when installing couplings. Water and soap solution is a better alternative.

STATIC ELECTRICITY

- In some applications, it is important that the hose conducts electricity from the end of one coupling, through the hose, to the other coupling. This electrical bond, called a Static Bond, dissipates the Static Electricity that some materials generate when they pass through the hose. If this electricity is not picked up and conducted away from the material by the hose, a dangerous explosion could result.
- To discharge Static Electricity, static wires are provided in such hoses e.g. Petrol, Sandblast etc.

GATES INDUSTRIAL HOSES

HOSE TYPE	NOMINAL I.D.	MEAN O.D.	WORKING PRESSURE			MIN BURST PRESSURE			BEND RADIUS		VACCUUM	SERVICE TEMP. RANGE	CONSTRUCTION	RECOMMENDED FOR
	inch	mm	kg/cm2	Mpa	Psi	kg/cm2	Mpa	Psi	mm	inch	in.Hg			
SIPPER AVIATION HOSE MEETS BS EN 1361 & API 1529 TYPE C 	1-1/2	56.0	20.00	2.00	285	80.00	8.00	1140	245	10.0	25	Tube: Black, Resistant to aviation fuel, Nitrile Rubber Reinforcement: 2 braid of High-tenacity synthetic yarn Cover: Black Anti-static NBR/PVC Rubber Recommended for all operations associated with Ground Fueling & De-Fueling of Aircrafts. Suitable for applications with Petroleum Fuels having an Aromatic Hydrocarbon content not exceeding 30% by volume.		
	2	66.3	20.00	2.00	285	80.00	8.00	1140	356	14.0	25			
	2-1/2	86.0	20.00	2.00	285	80.00	8.00	1140	508	20.0	25			
	3	98.5	20.00	2.00	285	80.00	8.00	1140	635	25.0	5			
WRESTLER HOSE MEETS IS: 5894 	3/4	33.2	12.00	1.20	175	48.00	4.80	700	178	7.0	25	Tube: Excellent abrasion resistant, Anti-static, Modified NR, Black Reinforcement: High-tenacity synthetic yarn. 3/4", 1" Single yarn braid 1-1/4" 1-1/2" Double yarn braid 2 braid of high tenacity Highly abrasive material used in Sand Blasting applications including River Sand Garnets, Copper Slag, Coal Particles, Corundum, Cast Steel, Grit Glass etc. Specially designed for superior performance- longer life due to very low tube wear.		
	1	39.2	12.00	1.20	175	48.00	4.80	700	229	9.0	25			
	1-1/4	48.2	12.00	1.20	175	48.00	4.80	700	254	10.0	25			
	1-1/2	56.2	12.00	1.20	175	48.00	4.80	700	304	12.0	20			
CONCRETE HOSE GATES PROPRIETARY HOSE 	2-1/2	89.0	85.00	8.50	1233	255.00	25.00	3700	760	30	10	Tube: Specially compounded abrasion resistant & resilient natural rubber black. Reinforcement: High tenacity synthetic yarn. Twin copper wire ensures reliable conductivity. Cover: Specially compounded abrasion resistant natural rubber black. Recommended to handle the pumping of concrete with high head pressure from concrete boom truck and as a discharge hose on the delivery end of high pressure concrete pumps. Specially designed high abrasion resistant tube is most suited for handling wet concrete, plaster or gout material.		
	3	100.0	85.00	8.50	1233	255.00	25.00	3700	1000	39.3	10			
BLACK SNAKE HOSE EXCEEDS BS EN1360 TYPE 3 	3/4	28.7	17.00	1.70	250	51.00	5.10	750	152	6.0	26	Tube: Specially compounded Nitrile rubber black. Resistant to highly aromatic gasoline. Reinforcement: Braided high tenacity steel wire. Cover: Modified Nitrile rubber black. Recommended for dispensing all types of petrol and diesel fuels for service station pumps. A heavy duty hard wall hose which does not collapse in reel use or behind the nozzle in demand service conditions		
	1	35.0	17.00	1.70	250	51.00	5.10	750	203	8.0	26			
	5/8	25.4	17.00	1.70	250	51.00	5.10	750	152	6.0	26			
	1-1/2	48.8	17.00	1.70	250	51.00	5.10	750	254	10.0	26			
*Available in Black, Blue, Green, Red & Yellow														
PETROL (GREENLINE) HOSE EXCEEDS IS: 2396 	3/4	32.2	7.00	0.70	100	28.00	2.80	400	152	6.0	20	Tube: Specially compounded nitrile rubber black. Resistant to highly aromatic gasoline. Reinforcement: Two Braid of high tenacity synthetic Cover: Modified Nitrile rubber, black. Recommended for dispensing all types of petrol and diesel fuels for service station pumps. Electrical conductivity having two number braided copper flex wires laid spirally in opposite direction for electrical conductivity.		
	1	38.0	7.00	0.70	100	28.00	2.80	400	203	8.0	20			
CARBON FREE HOSE NON CONDUCTIVE HOSE 	1/2	21.8	17.20	1.72	250	69.00	6.90	1000	102	4.0	25	Tube: Modified synthetic Rubber, grey Reinforcement: High tenacity synthetic yarn. Cover: Specially compounded Nitrile, green Recommended for specialist furnace coolant application in electrical steel industry and other non conductive applications. Engineered with specially developed carbon free tube and cover, whereby meeting service requirements of low leakage current (less than 20 micro at 6KVDC.		
	3/4	31.0	17.20	1.72	250	69.00	6.90	1000	127	5.0	25			
	1	37.5	17.20	1.72	250	69.00	6.90	1000	152	6.0	25			
	1-1/4	45.2	17.20	1.72	250	69.00	6.90	1000	191	7.5	25			
	1-1/2	53.6	17.20	1.72	250	69.00	6.90	1000	203	8.0	20			
	2	65.5	14.00	1.4	200	56.00	5.60	800	304	12.0	10			
GP 60 (CONDUCTIVE HOSE) GENERAL PURPOSE LOW PRESSURE HOSE 	1/4	13.3	20.00	2.00	290	60.00	6.00	870	45	1.8	26	Tube: NBR (Nitrile) Reinforcement: One or Two fiber braids. Cover: NBR (Nitrile)/PVC General industrial applications such as oil, alcohols, aqueous solutions, hydraulic fluids, acids, detergents and chemicals.		
	5/16	15.0	20.00	2.00	290	60.00	6.00	870	65	2.6	26			
	3/8	17.0	20.00	2.00	290	60.00	6.00	870	75	3.0	26			
	1/2	20.5	20.00	2.00	290	60.00	6.00	870	100	3.9	25			
	5/8	25.0	20.00	2.00	290	60.00	6.00	870	125	4.9	20			
	3/4	29.0	20.00	2.00	290	60.00	6.00	870	150	5.9	20			
GP 80 (CONDUCTIVE HOSE) GENERAL PURPOSE LOW PRESSURE HOSE 	1	35.0	20.00	2.00	290	60.00	6.00	870	180	7.1	20	Tube: NBR (Nitrile) Reinforcement: One or Two fiber braids. Cover: NBR (Nitrile)/PVC General industrial applications such as oil, alcohols, Aqueous solutions, hydraulic fluids, acids, Detergents and chemicals.		
	1/4	13.3	37.96	3.72	540	112.49	11.03	1600	45	1.8	26			
	5/16	15.0	37.96	3.72	540	112.49	11.03	1600	65	2.6	26			
	3/8	17.0	37.96	3.72	540	112.49	11.03	1600	75	3.0	26			
	1/2	20.5	37.96	3.72	540	112.49	11.03	1600	100	3.9	25			
	5/8	25.0	30.93	3.03	440	91.39	8.96	1300	115	4.5	20			
CHEMICAL HOSE EXCEEDS IS: 7654 Type 1 	3/4	31.0	10.00	1.00	150	40.00	4.00	600	152	6.0	5	Tube: Specially compounded EPDM, black. Reinforcement: High tenacity synthetic yarn. Cover: Specially compounded EPDM, black. Recommended for conveying dilute chemicals e.g. Alums Liquor, Caustic Soda, Lime solutions, Dilute Hydrochloric Acid, Dilute Sulphuric acid, Methyl Alcohol, Ethyl alcohol, Butyl alcohol, Isobutanol etc. [Ref. Gates Chemical Resistance Table or Gates representative for further information.		
	1	38.0	10.00	1.00	150	40.00	4.00	600	203	8.0	15			
	1-1/4	45.0	10.00	1.00	150	40.00	4.00	600	203	8.0	10			
	1-1/2	52.0	10.00	1.00	150	40.00	4.00	600	254	10.0	10			
WASHDOWN GREEN LINE HOSE EXCEEDS IS: 444 TYPE 3B 	3/8	18.9	28.00	2.80	400	112.00	11.20	1600	102	4.0	26	Tube: Modified Nitrile Rubber, Black Reinforcement: Single braid of high tenacity synthetic yarn. Cover: Modified Nitrile rubber, black. Recommended for all car washing and pressure washer application in Garages, Service Stations and Industries.		
	1/2	23.0	28.00	2.80	400	112.00	11.20	1600	127	5.0	26			
SUPER SPRAY (GREENLINE) HOSE EXCEEDS IS: 1677 TYPE 4 	3/8	21.0	55.00	5.50	800	165.00	16.50	2400	102	4.0	26	Tube: Modified Nitrile Rubber, Black Reinforcement: Single braid of high tenacity synthetic yarn. Cover: Modified Nitrile rubber, black. Recommended for very high pressure spraying of water based pesticides and chemicals in agriculture and forestry. Oil resistant tube ensures long life.		
	1/2	24.6	55.00	5.50	800	165.00	16.50	2400	127	5.0	3			
AIR DRILL BLACK HOSE 	3/4	28.3	34.50	3.45	500	138.00	13.80	2000	152	6.0	25	Tube: Specially compounded Nitrile Rubber, Black. Reinforcement: Single braid of high tensile steel wire. Cover: Option 1: Specially compounded highly abrasion resistant natural rubber, black. Option 2: Highly abrasion resistant modified Nitrile rubber, yellow. All sizes with perforated cover. Yellow cover MSHA IC 11C, Flame resistant. Recommended for heavy duty, high pressure use on industrial construction and pneumatic mining applications, requiring an extra heavy duty hose with an oil resistant tube and abrasion resistant cover.		
	1	36.6	34.50	3.45	500	138.00	13.80	2000	201	7.9	25			
	1-1/4	44.2	34.50	3.45	500	138.00	13.80	2000	254	10.0	25			
	1-1/2	50.5	34.50	3.45	500	138.00	13.80	2000	304	12.0	15			
	2	63.5	34.50	3.45	500	138.00	13.80	2000	355	14.0	15			
	2-1/2	79.7	34.50	3.45	500	138.00	13.80	2000	762	30.0	10			
ROCK DRILL (GREENLINE) HOSE Exceeds IS: 446 Type 3 	1/2	19.8	21.00	2.10	300	84.00	8.40	1200	127	5.0	25	Tube: Specially compounded Nitrile Rubber, Black. Reinforcement: Single braid of high tenacity synthetic yarn. Cover: Specially compounded highly abrasion resistant Nitrile rubber for size 12.5 mm & 20.0 mm Black High tension resistant modified natural rubber for size 25.0 mm, Black Recommended for heavy duty, high pressure use on industrial construction and pneumatic mining applications, requiring an extra heavy duty hose with an oil resistant tube and abrasion resistant cover.		
	3/4	28.0	21.00	2.10	300	84.00	8.40	1200	152	6.0	25			
	1	37.8	21.00	2.10	300	84.00	8.40	1200	203	8.0	25			
CNG HOSE MEETS SAE J30 R6 AIS D28 	1/4	12.7	21.00	2.10	300	48.00	4.80	700	76	3.0	26	Tube: Specially compounded oil resistant Nitrile Rubber, Black. Reinforcement: High tenacity synthetic yarn. Cover: Specially compounded oil abrasion resistant Nitrile rubber Black Recommended for CNG applications for use in CNG kits in automobiles upto 2.1 Mpa- (cars LCV, HCV etc.)		
	5/16	14.3	21.00	2.10	300	48.00	4.80	700	102	4.0	26			
	3/8	15.9	21.00	2.10	300	48.00	4.80	700	102	4.0	26			
	1/2	19.8	21.00	2.10	300	48.00	4.80	700	127	5.0	20			
	5/8	23.8	21.00	2.10	300	48.00	4.80	700	152	6.0	15			
	3/4	28.5	21.00	2.10	300	48.00	4.80	700	152	6.0	15			
STEAM KING HOSE EXCEEDS IS: 10655 TYPE 3 & BS: 5342 TYPE 2 	3/4	32.3	17.20	1.72	250	172.00	17.20	2500	229	9.0	20	Tube: EPDM, Black. Reinforcement: Single braid of high tenacity brass coated steel wire for size 12.7 mm Two braids of high tensile brass coated steel wire for size 20.0 mm to 50.0 mm. Cover: EPDM, black. All sizes are perforated. Recommended for heavy duty industrial uses including heat control, melting of substance such as wax and glue, thawing, cleaning and steam transfer applications. It will handle all types steam saturated and superheated up to 185 psi and +232 degree centigrade. Note: Do not alternate change between steam and water.		
	1	38.5	17.20	1.72	250	172.00	17.20	2500	279	11.0	20			
	1-1/4	46.0	17.20	1.72	250	172.00	17.20	2500	406	16.0	20			
	1-1/2	54.3	17.20	1.72	250	172.00	17.20	2500	508	20.0	10			
	2	67.5	17.20	1.72	250	172.00	17.20	2500	635	25.0	10			
STEAM (GREENLINE) HOSE EXCEEDS IS: 10655 TYPE 2 & BS: 5342 TYPE 1 	3/4	31.0	10.00	1.00	150	100.00	10.00	1500	254	10.0	25	Tube: EPDM, Black. Reinforcement: Single braid of high tenacity brass coated steel wire for size 12.7 mm Cover: EPDM, black. All sizes are perforated. Recommended for excellent steam handling. The hose features a specially compounded, perforated synthetic rubber cover intended for use where the hose is exposed to all types of steam-saturated and superheated up to 150 psi and 195 degree centigrade. Note: Do not alternate change between steam and water.		
	1	36.6	10.00	1.00	150	100.00	10.00	1500	304	12.0	15			
	1-1/4	43.5	10.00	1.00	150	100.00	10.00	1500	406	16.0	15			
	1-1/2	50.6	10.00	1.00	150	100.00	10.00	1500	508	20.0	15			
	2	63.5	10.00	1.00	150	100.00	10.00	1500	635	25.0	10			
SAND BLAST HOSE EXCEEDS IS: 5894 TYPE 1 	3/4	38.6	7.00	0.70	100	35.00	3.50	500	203	8.0	15	Tube: Specially compounded abrasion resistant & resilient natural rubber, Black. Reinforcement: High tenacity synthetic yarn. Twin Copper wires ensure reliable conductivity. Cover: Specially compounded abrasion resistant natural rubber. Black. Recommended for sand, shot blasting applications and where abrasive material are carried at high velocity. Electrical conductivity: having two numbers braided copper flex wires laid spirally in opposite direction for electrical conductivity.		
	1	45.1	7.00	0.70	100	35.00	3.50	500	304	12.0	5			
	1-1/4	52.7	7.00	0.70	100	35.00	3.50	500	304	12.0	5			
	1-1/2	58.5	7.00	0.70	100	35.00	3.50	500	457	18.0	5			
	2	74.7	7.00	0.70	100	35.00	3.50	500	508	20.0	5			
PNEUMATIC (GREENLINE) HOSE EXCEEDS IS: 446 TYPE 2 	1/4	12.7	14.00	1.40	200	56.00	5.60	800	76	3.0	26	Tube: Modified Nitrile Rubber, Black. Reinforcement: Single braid of high tenacity synthetic yarn for size 6.3mm to 25mm. Single braid of high tensile brass coated Steel wire for size 31.5 mm to 50.0 mm. Cover: Specially compounded high abrasion resistant Nitrile rubber for size 6.3mm to 20 mm. Black. Highly abrasion resistant modified natural rubber for sizes 25.0 mm and above. Black. Recommended for all types of pneumatic tools in industries, compressed air applications and construction industry.		
	5/16	14.3	14.00	1.40	200	56.00	5.60	800	102	4.0	26			
	3/8	16.7	14.00	1.40	200	56.00	5.60	800	102	4.0	26			
	1/2	20.0	14.00	1.40	200	56.00	5.60	800	127	5.0	25			
	3/4	28.5	14.00	1.40	200	56.00	5.60	800	1					