



Polyurethane (PU) Tube, Colled Hose & Round Belt

AMATIC

India's Most Trusted Hose



Industrial Hoses Catalog



About us

ARK Polychem Private Limited is one of the prominent and distinguished manufacturers of Industrial Hoses which include Polyurethane Pipes and Tubes, Recoil Hoses, Polyurethane Round Belts, PVC Braided Hoses, Welding Hoses, Spray Hoses and other wide variety of hoses used in Pneumatic applications.

Strength, Durability and Innovation are the hallmarks of every product manufactured at ARK Polychem Private Limited.

ARK Polychem has been marketing its product under the brand name of "AMATIC" and "ATP", which have achieved nationwide acceptance and soon we would be International with the able support of our patrons and channel partners across India and abroad.

Our all innovations are based on PQR theory, which is primarily known as Performance, Quality and Reliability. It is our belief that once the Performance of our hoses are checked, it would be best in Quality and will set Reliable standards for the industry and for us. With this belief, we are very pleased to announce to our patrons, channel partners, Industry and Domain heads that we are India's fastest growing Plastic Pipe company in India and soon we will achieve the highest benchmark in the field of Industrial Hoses in India and International market.

Our infrastructure capabilities are at par with International standards and we are in the process of setting up a bigger plant capacities to be able to cater to our ever-growing market and growing list of our patrons.

On this note, I on behalf of the entire team of ARK Polychem Private Limited, thank and wish our partners a long & cherished journey ahead and wish them all the best in all their endeavors.

Team

ARK Polychem Private Limited





Polyurethane Tubings



Polyurethane Tubing is fast becoming an ideal choice for pneumatic applications. It combines the elasticity of rubber with the chemical resistance normally reserved for plastics.

Polyurethane Tubing is a flexible, kink resistant and abrasion resistant tube commonly used in pneumatic control systems. It is easy to assemble on to fittings and has excellent hydrolytic stability.

Salient Features

- Excellent resistance to Oils, Greases, aliphatic hydrocarbons, oxygen and Ozone.
- Flexibility of PU tube is good under very low temperature.
- Inner wall of PU tubing is very smooth for transportation of air.
- PU Tubing is much lighter than rubber.
- Available in multi colors for easy identification.
- In-built meter marking for ready measure.

Applications

- Printing and Packaging machines.
- Food & beverage processing machines.
- Wood processing machines.
- Paper processing machines.
- Automobile equipment.

Technical Specification

Operating Fluid	Air
Max Operating Pressure	10 bar
Applicable Fitting	One touch fitting
Operating Temperature	- 20 degree to 60 degree
Material	Polyurethane
Hardness	98A+0-0.3 Shore Hardness

Sizes and Standard Working Pressure

PU Tubing Sizes (mm)		Tolerances	Working Pressure at 30 °c (kg/cm ²)	Bending Radius (mm)	Standard Length (m)
OD	ID				
4	2.5	(±) 0.10	10	08	100
6	4	(±) 0.10	10	16	100
8	5	(±) 0.10	10	22	100
8	5.5	(±) 0.10	09	24	100
8	6	(±) 0.10	07	28	100
10	6.5	(±) 0.10	10	25	100
10	8	(±) 0.12	06	28	100
12	8	(±) 0.15	10	33	100
12	9	(±) 0.15	08	38	100
12	10	(±) 0.15	05	40	100
14	10	(±) 0.15	09	45	50
16	12	(±) 0.15	08	45	50

Polyurethane Re-coil Hose

Polyurethane Recoil Hoses possess outstanding memory, a soft feel and superior flexibility. These coils are extraordinary tough and resistant to abrasion, over stretching, kinking and repeated flexing.

Salient Features

- Space saving.
- Standard linear length: 3m, 5m, 10m, 15m.
- Possess excellent memory and flexibility.
- Working pressure upto 10kg/Cm².

Applications

- Machine Tools.
- Primary Metal Refining and Processing.
- Miscellaneous Manufacturing.
- Vehicle Assembly Facilities.
- Compressed Air Conveying.
- Applications Subjected to Abrasion.
- Maintenance Workshop.

Technical Specification

Operating Fluid	Air
Max Operating Pressure	10 bar
Applicable Fitting	One touch fitting
Operating Temperature	-20 degree to 60 degree
Material	Polyurethane
Hardness	98A Shore Hardness

Re-Coil Hose Dimensions

Coil Tube Size	Working Length	Working Pressure at 30 °C (kg/cm ²)
6mm x 4mm	3m, 5m, 10m, 15m, 20m	10 kg/cm ²
8mm x 5mm	3m, 5m, 10m, 15m, 20m	10 kg/cm ²
10mm x 6.5mm	3m, 5m, 10m, 15m, 20m	10 kg/cm ²
12mm x 8mm	3m, 5m, 10m, 15m, 20m	10 kg/cm ²



Nylon Coiled Hose



Nylon coiled tubing / hose is very flexible yet tough in nature. It has the spring action quality and always retracts back to its original shape. Flexible Nylon coiled tubing helps you keep your work area organized and safe.

Our retractable coiled hose / tube can be fitted with the variety of tube fittings such as brass, MS, SS- swivel compression fittings along with spring guards. You can very easily use Push in fittings as well with our coiled air hoses.

Size

Coil Tube Size	Working Length	Wkg. Pressure
6mm x 4mm	2 mtrs to 20 mtrs	45 kg/cm ²
8mm x 6mm	2 mtrs to 20 mtrs	30 kg/cm ²
10mm x 8mm	2 mtrs to 15 mtrs	30 kg/cm ²
12mm x 9mm	2 mtrs to 20 mtrs	30 kg/cm ²
16mm x 12mm	2 mtrs to 20 mtrs	25 kg/cm ²

Salient Features

- Resistant to abrasion and vibration.
- Pressure losses are low because of smooth internal surface.
- Low weight as compared to rubber hoses.
- Working Pressure upto 30 kg/cm² and temperature upto 80 C

Applications

- It is ideal for use with air tools, blow guns, impact wrenches and such pneumatic tools.
- Best as trailer hose.



PU Round Belts or PU Cord

PU round belts are the most versatile and economical of all powered system. These are also used as transmission belts. They are classified as Rough (Green Color) and Smooth (Orange color) belts.

PU 85A Green Rough and PU 85A Smooth Belts Specifications

Diameter mm	Cross Section (Ø cm ²)	Standard Packing (meter/roll)	Recommended Min. pulley Ø mm	Fmax/belt (standard)* Kg
2.0	0.032	200	15	1.2
3.0	0.071	200	25	2.7
4.0	0.126	100	35	4.7
5.0	0.197	100	50	7.1
6.0	0.283	100	60	10.4
7.0	0.385	50	70	14.1
8.0	0.500	30	80	18.4
10.0	0.785	30	100	28.6
12.0	1.130	30	120	40.8

Salient Features

- Excellent bend resistant.
- It is Abrasion/wear resistant.
- Can be easily connected.
- It is not easy to be broken at low temperature.
- It is fuel and oil resistant.
- Antistatic Belt.

Applications

- Widely used in textile.
- Printing and packing machine.
- Food & beverage processing.
- Wood processing.
- Paper processing.
- Electronic.
- Post service.
- Tobacco transmission line.
- Wall floor tile conveying industrial line.
- Ceramic industry line or polishing line.

Nylon Tubing

Technical Specification

Nylon tubing has High impact strength, High resistant to abrasion and Good functioning over wide range of temperatures. These tubes are semi flexible to super flexible and so a best substitute to copper and other metallic pipes, Nylon tubes are available in grade Pa6, in various colors and are used for medium to high pressure to convey gas, oil, air and other fluids.

Operating Fluid	Air/Liquid
Max Operating Pressure	20 bar at 20 °C
Burst Pressure	Please refer burst pressure chart
Applicable Fitting	One touch fitting
Operating Temperature	-30 °C to 80 °C
Material	PA6
Shore Hardness	Shore D70

Salient Features

- Very cost effective in comparison to copper and aluminum tubes.
- Bendable and re-bendable easily.
- Flexible in nature in comparison to copper and aluminum.
- Available in various colors such as white, black, blue, yellow, red, green etc.

Nylon Tubes : Sizes and Pressure Rating

Outer Diameter mm	Inner Diameter mm	Working Pressure Kg/cm ²	Min Bend Radius mm
3	1.5	65	20
3	2	40	20
4	2	65	20
4	2.5	50	20
4	3	30	20
4.7	2.7	55	25
5	3	50	35
5	4	25	40
6	3	65	40
6	4	45	40
6	5	20	40
6.35	4.35	40	40
8	5	50	50
8	5.5	40	50
8	6	30	60
9.5	6	50	60
9.5	7.5	30	70
10	6	50	60
10	8	30	70
11	8	35	80
12	9	30	80
12	10	20	90
12.5	9.5	30	85
14	11	30	95
14	12	20	100
15	12	25	105
16	14	16	110

Applications

- Fuel lines for petrol or diesel fuel in Automobile and Transport Industry.
- Compressed air lines on pneumatic control systems.
- Automotive gasoline lines.
- Automotive hydraulic lines.
- High Pressure lubricating oil lines in Engineering and Automobile Industry.
- Lubes and air lines on textile machinery through nylon tubes.
- Transporting nylon tube lines for alimentary liquids such as milk and biological liquids such as blood, serum etc.
- In the chemical industries for conveying hydrocarbons, esters, ketones etc.
- Centralized lubrication systems.
- Gas lines by nylon tubing's for various industries.



Welding Hose (TPR)

Thermoplastic welding hoses meets all requirements for welding, brazing and cutting operations including oxygen and Acetylene welding by hand and machine. This hose is manufactured by using high quality tested raw material and using best quality nitrile rubber compound, in accordance with latest technology and in compliance with set industry standards.

Welding Hoses manufactured by us are BIS certified as per CML number 8700036611

Salient Features

- Approved by BIS as per ISI 447 wide CML number 8700036611.
- Light weight and flexible.
- Strong enough to withstand High pressure.
- Abrasion resistant.
- Rodent proof.
- Crush and kink resistant.
- Resistant to chemicals and alkali.
- Available in two colors Red for Acetylene and Blue for Oxygen.

Applications

- Suitable for oxy-acetylene welding and cutting equipments in all types of industrial workshops.
- Oil refineries, steel mills, ship building repair & breaking yards, service stations, garages.

Technical Specification

Operating Fluid	Air
Max Operating Pressure	20-25 bar
Burst Pressure	50 bar
Operating Temperature	-5 °C to 80 °C
Wall Thickness	3.25 mm
Material	Thermoplastic Hybrid PVC compound
Reinforcement :	High Quality Synthetic Braided yarn
Adhesion between Lining & Covers	At least 1.4 kN/m, in accordance with IS:3400 (Part-24):2001/ISO 8033:1991
Fire retarding properties	Our Thermoplastic Hybrid Compound has inherently superior fire retarding properties due to its Chlorine content. Its ignition temperature is as high as 455°C, and is a material with less risk for fire incidents since it is not ignited easily. It is a self extinguishing material and does not continue to burn.

Sizes

Working Pressure		Testing Pressure		Minimum Burst Pressure	
Kgf/cm2	PSI	Kgf/cm2	PSI	Kgf/cm2	PSI
12.5	180	25	360	50	725





PVC Spray Hose & Power Spray Hose

Using our unique technology, we manufacture Spray Hose, Car Washing Power Hose and Rock Drill Hose, the first and only product range made in India of this kind. Power Spray hose is constructed with full weaving of synthetic yarn and with normal reinforcement as well in between two thermoplastic layers. It is very light weight and economical compared to double braided plastic/rubber hoses.

Technical Specification

Operating Fluid	Air/Water/Liquid
Max Operating Pressure	30-60 bar
Burst Pressure	150-200 bar
Operating Temperature	-5 °C to 60 °C
Wall Thickness	3 mm-4mm
Material	PVC compound
Reinforcement:	High Quality Synthetic Braided yarn

Salient Features

- Manufactured from best pvc compound and reinforced with high-strength polyester filament.
- Can work under very high working pressure.
- Its light, flexible, durable, anti-erosion and explosion resistant.

Spray Hose

Size (mm)		Burst Pressure at 30 °C	Standard Length (m)
ID	OD		
8	14.5	150 kg/cm ²	30/50/100
8	16	180 kg/cm ²	30/50/100
10	16	120 kg/cm ²	30/50/100
10	18	150 kg/cm ²	30/50/100
12	19	150 kg/cm ²	30/50/100

Power Spray Hose

Size (mm)		Burst Pressure at 30 °C	Standard Length (m)
ID	OD		
8	14.5	220 kg/cm ²	30/50/100
10	18	220 kg/cm ²	30/50/100

Applications

- Be widely used in pneumatic tools.
- Air Compressors.
- Garages and Car washing.
- Ideal for high pressure spraying of Pesticides (water based chemicals, insecticides, fungicides, weeding etc.) in plantation orchard, forestry, parks, vineyards
- Variety of other areas involving spraying by hand or power driven pumps.



PVC Braided Hoses

PVC BRAIDED HOSE PIPE offers far higher pressure capability, It is made from non-toxic Ingredients. Mirror Smooth interior permits outstanding flow characteristics conforming and abrasion resistance with flexibility. It is light in weight so easy to handle. It does not crack when in use or stored for long time. PVC makes the surface smoother and allows better flow of fluid. Its clear transparency allows, air lock and blockage if any, to be quickly detected.

Technical Specification

Operating Fluid	Air/Water/Liquid
Max Operating Pressure	10-25 kg/cm ²
Burst Pressure	50-100 kg/cm ²
Operating Temperature	-5 °C to 60 °C
Wall Thickness	3 mm-4mm
Material	PVC compound
Reinforcement:	High Quality Synthetic Braided yarn

Sizes and Working Pressure

Size (mm)		Working Pressure at 30 °C	Standard Length (m)
ID	OD		
5	10	20 kg/cm ²	100
6	12	25 kg/cm ²	100
8	13	20 kg/cm ²	100
8	14	22 kg/cm ²	100
8	16	25 kg/cm ²	100
10	16	20 kg/cm ²	100
12	17	15 kg/cm ²	100
12	19	18 kg/cm ²	100
16	22	15 kg/cm ²	100
19	25	12 kg/cm ²	50/100
19	27	15 kg/cm ²	50/100
25	31	10 kg/cm ²	50/100
25	33	12 kg/cm ²	50/100

Salient Features

- Strong enough to with stand high pressure.
- Light in weight than rubber hose so easy to handle.
- Smooth inner surface permits better flow of fluid.
- Does not kick or crack when in use or unused for longer time.
- Excellent transparency allow to see, detect flow fluid.
- Reinforced tube wall eliminates flows interruption caused by outside pressure.
- No damages to the pipe from rodents.

Applications

- Agriculture.
- Air & Gas Lines.
- Beverage Transfer.
- Chemical Processing & Transfer.
- Laboratory & Research.
- General Water Suction & Discharge.
- Pharmaceutical Manufacture.
- Pools & Spas Refrigeration & Cooling systems.

Air/Pneumatic Hose & Water Hose

Air/Pneumatic Hose is manufactured using thermoplastic pvc compound, which has properties similar to rubber compound to withstand high pressure and temperature conditions. It is constructed with full weaving of synthetic yarn and with normal reinforcement as well in between two thermoplastic layers. It is very light weight and economical compared to double braided plastic/rubber hoses.

Technical Specification

Operating Fluid	Air/Water/Liquid
Max Operating Pressure	30-60 bar
Burst Pressure	150-200 bar
Operating Temperature	-5 °C to 80 °C
Wall Thickness	3 mm-4mm
Material	Thermoplastic PVC compound
Reinforcement:	High Quality Synthetic Braided yarn

Thermoplastic Pneumatic Hose sizes and Working Pressures

Size (mm)		Working Pressure at 30 °C	Standard Length (m)
ID	OD		
8	15	25 kg/cm ²	100
10	16	20 kg/cm ²	100
10	18	25 kg/cm ²	100

Thermoplastic Water Hose sizes and Working Pressures

Size (mm)		Working Pressure at 30 °C	Standard Length (m)
ID	OD		
12	17	15 kg/cm ²	100
12	19	18 kg/cm ²	100
19	25	12 kg/cm ²	50/30/100
19	26	15 kg/cm ²	50/30/100
25	31	10 kg/cm ²	50/30/100
25	33	12 kg/cm ²	50/30/100

Salient Features

- Manufactured from best quality thermoplastic pvc compound and reinforced with high strength polyester filament.
- Can work under very high working pressure
- Its light, flexible, durable, anti-erosion and explosion resistant.

Applications

- Be widely used in pneumatic tools.
- Air Compressors.
- Garages and Car washing.
- Ideal for high pressure spraying of Pesticides (water based chemicals, insecticides, fungicides, weeding etc.) in plantation orchard, forestry, parks, vineyards.
- Variety of other areas involving spraying by hand or power driven pumps.



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