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张家港市青辰雨机械有限公司
ZHANGJIAGANG QING CHEN YU MACHINERY CO.,LTD



产品手册

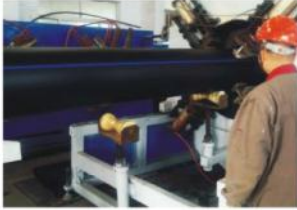
Product & Dimensions Brochure

HIGH DENSITY POLYETHYLENE PIPE

HDPE pipe (High-density polyethylene pipe) is made from high density polyethylene as the main raw material, adding a small amount of antioxidants, anti-UV absorbers and pigments.

Characteristics of HDPE Pipe

1. Non-toxic, health: PE pipe material non-toxic, tasteless, through the strict health monitoring, it belongs to green building materials, never scaling, which can effectively improve the water quality.
2. Corrosion resistance: PE belongs to inert materials, can resist to various chemical media.
3. No leakage: PE pipe is connected by hot melting, its interface strength higher than tube itself.
4. High toughness: Fracture extension rate of PE pipe, commonly more than 500%. As to the uneven settlement of the base, its adaptive ability is very strong, good aseismic performance.
5. Excellent resistance to quickly crack propagation (RCP) ability.
6. Excellent flexibility and resistance to scratches ability.
7. Good wear resistance, low wall friction coefficient, small flow resistance, excellent conveying ability.
8. Can use a variety of trenchless ways, great convenient for construction and installation.
9. Low system cost, less maintenance costs, can dramatically reduce the cost for the project.
10. Long service life: Black buried PE pipe normally can be used for more than 50 years.
11. PE material can be reused, complying with the concept of efficient environmental protection which our state advocates.



Application of HDPE Pipe

High density polyethylene pipe can be widely used for city and town water supply system or project; used to transport natural gas & coal gas in daily life; transport sand, mud, slurry for dredger in dredging projects or sand suction projects; It is the ideal choice to replace cement pipe, cast iron pipe and steel pipe.



Technical Requirements of HDPE Pipe

Item	Technical requirements
Appearance	Inner and outer surfaces should be smooth, flat. Defects like bubble, obvious scratch, dents, impurity, uneven color are not allowed. Pipe end should be cut flat and keep vertical with pipe axis.
Thermal Stability(200 °C).min	>20
Elongation at Break(%)	≥ 350
Longitudinal Retraction Rate	≤ 3
Melt Flowing Rate(MFR)(190°C.5kg)/10min	Before and after processing, MFR change rate <20%
Hydrostatic Strength	1. 20°C. hoop stress: 9.0Mpa; time to rupture: ≥ 100h
	PE80 2. 80°C. hoop stress: 4.5Mpa; time to rupture: ≥ 165h
	3. 80°C. hoop stress: 4.0Mpa; time to rupture: ≥ 1000h
	1. 20°C. hoop stress: 12.4Mpa; time to rupture: ≥ 100h
	PE100 2. 80°C. hoop stress: 5.4Mpa; time to rupture: ≥ 165h
	3. 80°C. hoop stress: 5.0Mpa; time to rupture: ≥ 1000h

PE80 HDPE PIPE

Standard: GB/T13663-2000/ISO 4427						
Nominal Pressure	0.4Mpa	0.6Mpa	0.8Mpa	1.0Mpa	1.25Mpa	Pipe Length
SDR	SDR33	SDR21	SDR17	SDR13.6	SDR11	
DN/OD	Thickness	Thickness	Thickness	Thickness	Thickness	
20				2.3	2.3	Coil or Straight
25				2.3	2.3	Coil or Straight
32			2.3	2.4	3	Coil or Straight
40		2.3	2.3	3	3.7	Coil or Straight
50		2.3	2.9	3.7	4.6	Coil or Straight
63	2.3	2.5	3.6	4.7	5.8	Coil or Straight
75	2.9	3.6	4.5	5.6	6.8	6.9.12
90	2.8	4.3	5.4	6.7	8.2	6.9.12
110	3.4	5.3	6.6	8.1	10	6.9.12
125	3.9	6	7.4	9.2	11.4	6.9.12
140	4.3	6.7	8.3	10.3	12.7	6.9.12
160	4.9	7.7	9.5	11.8	14.6	6.9.12
180	5.5	8.6	10.7	13.3	16.4	6.9.12
200	6.2	9.6	11.9	14.7	18.2	6.9.12
225	6.9	10.8	13.4	16.6	20.5	6.9.12
250	7.7	11.9	14.8	18.4	22.7	6.9.12
280	8.6	13.4	16.6	20.6	25.4	6.9.12
315	9.7	15	18.7	23.2	28.6	6.9.12
355	10.9	16.9	21.1	26.1	32.2	6.9.12
400	12.3	19.1	23.7	29.4	36.3	6.9.12
450	13.8	21.5	26.7	33.1	40.9	6.9.12
500	15.3	23.9	29.7	36.8	45.4	6.9.12
560	17.2	26.7	33.2	41.2	50.8	6.9.12
630	19.3	30	37.4	46.3	57.2	6.9.12
710	21.8	33.9	42.1	52.2		6.9.12
800	24.5	38.1	47.4	58.8		6.9.12
900	27.6	42.9	53.3			6.9.12
1000	30.6	47.7	59.3			6.9.12

PE100 HDPE PIPE

Standard: GB/T13663-2000/ISO 4427						
Nominal Pressure	0.6MPa	0.8MPa	1.0MPa	1.25MPa	1.6MPa	Pipe Length
SDR	SDR26	SDR21	SDR17	SDR13.6	SDR11	
DN/OD	Thickness	Thickness	Thickness	Thickness	Thickness	
16					2	Coil or Straight
20				2	2.3	Coil or Straight
25				2.3	3	Coil or Straight
32			2.3	2.4	3	Coil or Straight
40		2.3	2.3	3	3.7	Coil or Straight
50		2.3	2.9	3.7	4.6	Coil or Straight
63	2.3	2.5	3.6	4.7	5.8	Coil or Straight
75	2.9	3.6	4.5	5.6	6.8	6.9.12
90	3.5	4.3	5.4	6.7	8.2	6.9.12
110	4.2	5.3	6.6	8.1	10	6.9.12
125	4.8	6	7.4	9.2	11.4	6.9.12
140	5.4	6.7	8.3	10.3	12.7	6.9.12
160	6.2	7.7	9.5	11.8	14.6	6.9.12
180	6.9	8.6	10.7	13.3	16.4	6.9.12
200	7.7	9.6	11.9	14.7	18.2	6.9.12
225	8.6	10.8	13.4	16.6	20.5	6.9.12
250	9.6	11.9	14.8	18.4	22.7	6.9.12
280	10.7	13.4	16.6	20.6	25.4	6.9.12
315	12.1	15	18.7	23.2	28.6	6.9.12
355	13.6	16.9	21.1	26.1	32.2	6.9.12
400	15.3	19.1	23.7	29.4	36.3	6.9.12
450	17.2	21.5	26.7	33.1	40.9	6.9.12
500	19.1	23.9	29.7	36.8	45.4	6.9.12
560	21.4	26.7	33.2	41.2	50.8	6.9.12
630	24.1	30	37.4	46.3	57.3	6.9.12
710	27.2	33.9	42.1	52.2		6.9.12
800	30.6	38.1	47.4	58.8		6.9.12
900	34.4	42.9	53.3			6.9.12
1000	38.2	47.7	59.3			6.9.12

HDPE PIPE FITTINGS



Butt fusion Stub End



Butt Fusion 45° Elbow



Butt Fusion Reducer



Metal Flange Ring



Butt Fusion 90° Elbow



Socket Joint Fusion Equal Coupling



Butt Fusion End Cap



Butt Fusion Equal Cross



Butt Fusion Reducer Tee



Socket Joint Fusion Equal Tee



Socket Joint Fusion Reducing Coupling



Socket Joint Fusion 90° Equal Elbow



Butt Fusion Equal Tee



Socket Joint Fusion 45° Equal Elbow



Socket Joint Fusion Reducing Tee



Socket Joint Fusion End Cap



Fabricated Equal Tee Cross



Fabricated Elbow



Fabricated Reducer Tee



Fabricated Equal Tee



Socket Joint Fusion Socket Washer



Fabricated Y Branch Tee



Electfusion Reducer



Electfusion Coupler



Electfusion 90° Elbow



Electfusion Reducer Tee



Electfusion Equal Tee



Electfusion 45° Elbow



Electfusion Stub End



Male Threaded Coupler



Rubber Ring



Female Threaded Elbow

ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE PIPE

Brief Introduction of UHMWPE Pipe

Ultra high molecular weight polyethylene(UHMWPE) pipe is a thermoplastic engineering plastic pipe with a viscosity-average molecular weight greater than 2.5 million. UHMWPE is called "marvelous plastics", a new star of materials. It will present a vigorous life and play an important part in many fields.

Characteristics of UHMWPE Pipe

1. Extremely high abrasion resistance

UHMWPE pipe's high abrasion resistance is 4-7 times of steel pipe's, 10 times of PE & PP pipe's, 2.3 times of HDPE pipe's.

2. Very high impact resistance

The impact resistance of UHMWPE pipe is 2 times of PC pipe's, 5 times of ABS pipe's, 8 times of POM and PBT pipe's, more than 10 times of PE100 pipe's in ordinary temperature; above 16 times of PE100 pipe in -30°C.

3. Good self-lubrication

UHMWPE pipe contains the waxy substance itself, and its self-lubrication is very good. The frictional coefficient (196N, 2 hours) is only 0.219MN/m (GB3960), so its self-lubrication is better than steel or brass with oil lubrication.

4. Not easy to form dirt

Existing materials form dirt usually in the medium with PH value of 9 or above, but UHMWPE pipe can't form dirt. Its internal wall is smooth, roughness is 1/6 of the steel pipe's. And it has good self-lubrication, so small flow resistance.

5. Good corrosion resistance

UHMWPE pipe can resist corrosion by strong oxidizing acid solution, acid, alkali, salt and organic solvent (except naphthalene solvent) and many kinds of corrosive medium in a certain temperature and the concentration range.

6. High tensile yield strength and tensile fracture strength

The high elongation of UHMWPE pipe is 400%, so UHMWPE pipe can't fracture by large bending. And it can't break by large tensile in the crustal subsidence, so avoid accidents.

7. The unique resistance to low temperature

UHMWPE pipe is the only kind of engineering plastic pipe that can work in near absolute zero temperature now. And it can work in -269°C to 80°C temperature for a long time.

8. Long life-span

UHMWPE pipe can still maintain more than 70% mechanical properties after it is buried underground and used for 50 years.

9. Easy installation

The weight of UHMWPE pipe in the unit length is only 1/8 that of steel pipe, which makes loading and unloading, transportation, installation be more convenient, and can reduce workers' labor intensity.



Application Fields of UHMWPE Pipe

1. To transport sand, mud and slurry in river, harbor, sea water dredging industry.
2. To transport mine tailings and slurry in the metallurgical mines and mining industry.
3. To transport powder and coal ash in thermal power plant.
4. To transport pulverized coal and coal-water slurry of coal preparation plant in the coal industry.
5. To transport mud and corrosive media with slag in the chemical industry.
6. To transport crude oil, petroleum and food.

Specification of UHMWPE Pipe

Diameter (mm)	0.6MPa		0.8MPa		1.0MPa		1.25MPa		1.6MPa		2.0MPa		
	Thick mm	Kg/m	Thick mm	Kg/m	Thick mm	Kg/m	Thick mm	Kg/m	Thick mm	Kg/m	Thick mm	Kg/m	
65									8	1.35	9	1.5	
96									9	2.33	10	2.55	
110									8	2.42	10	2.97	
130								8	2.9	10	3.56	12	4.21
159								10	4.43	12	5.24	15	6.24
168					8	3.8	10	4.69	13	5.98	16	7.22	
205			8	4.68	10	5.79	12	6.88	15	8.46	18	10	
219			9	5.61	11	6.8	13	7.95	16	9.65	20	11.82	
236			10	6.71	12	7.98	14	9.23	18	11.65	22	13.98	
250			10	7.13	12	8.48	15	10.47	19	13.04	23	15.51	
273	9	7.06	11	8.56	13	10.04	16	12.21	21	15.72	25	18.41	
280	9	7.24	11	8.79	14	11.06	17	13.28	21	16.15	26	19.61	
300	10	8.61	12	10.26	15	12.07	18	15.08	23	18.92	27	21.89	
315	10	9.06	12	10.8	15	13.37	19	16.7	24	20.74	29	24.63	
325	10	9.36	13	12.05	16	14.68	19	17.27	24	21.46	30	26.28	
350	11	11.08	14	13.97	17	16.81	21	20.52	26	25.02	32	30.22	
377	12	13.01	15	16.13	18	19.19	22	23.2	28	29.02	35	35.55	
400	12	13.83	16	18.25	19	21.5	24	26.8	30	32.97	36	38.92	
415	13	15.52	16	18.96	20	23.46	25	28.96	31	35.35			
426	13	15.95	17	20.65	20	24.12	25	29.77	32	37.45			
536	16	24.71	21	32.12	26	39.38	32	47.9					
560	16	25.85	22	35.15	27	42.74	33	51.65					
630	19	34.48	25	44.92	30	53.46	37	65.16					
652	20	37.54	26	48.34	32	58.46	38	69.3					
710	21	42.93	27	54.77	34	68.26							
800	23	53.08	31	70.8	38	86							

Other sizes of uhmwpe pipe can be made upon request.

Parameters of UHMWPE Pipe

Item	Unit	Test Method	UHMWPE Model No.		Other Engineering Plastics			
			M-II	M-III	Nylon 66	Pc Polycarbonate	Polyoxymethylene	PTFE
Density	g/cm ³	ASTM D1505	0.935	0.930	1.14	1.2	1.4	2.16
Average Molecular Weight	Million	Viscosity Method	2.5	3.5	-	-	-	-
Yield Point Stress	Kg/cm ²	ASTM D638	220	220	-	-	-	-
Tensile Strength	Kg/cm ²	ASTM D638	400	500	750	640	700	200
Ultimate Elongation	%	ASTM D638	350	300	200	110	75	300
Impact Strength (No Gap)	Kg.cm/cm	ASTMD256/td>	Unbroken	Unbroken	11	80	10	16
Impact Strength (Gap)	Kg.cm/cm	ASTMD256	110	105	-	-	-	-
Brinell Hardness	D	ASTMD2240	40	40	100	118	120	-
Kinetic Friction Coefficient	Kg/cm ² .m/s	Sanjing Shanhua	0.2	0.2	0.4	-	0.4	0.2
Wear Rate (Sanding Method)	mg	Sanjing Shanhua	20	15	-	-	170	225
Melting Point	°C	ASTMD2117	136	136	255	240	166	-
Vicat Softening Point	°C	ASTMD1525	134	134	-	-	-	-
Heat Distortion Temperature	°C	ASTM D648	85	80	200	138	170	121
Expansion Coefficient	10-4/°C	ASTMD696	1.5/td>	1.5	0.8	0.66	0.81	1.0
Thermal Conductivity	10-cal/cm.s.°C	ASTMD177	8.5	8.5	5.85	4.6	5.5	6.0
Water Absorption Rate	%	ASTMD570	0.01	0.01	1.5	0.15	0.25	0.02

Project Cases of UHMWPE Pipe



SELF-FLOATING HOSE

Good abrasion-resistant floating hose, closed PE foam cell and reinforced rubber shell contributes to a reliable floating hose. The inner hose is fabricated by SBR which has excellent resistance using abrasive materials and corrosive chemicals. Outer layer protects the hose from damage by sea water corrosion and ozone degradation. Foam is designed to provide buoyancy and can withstand huge impact on rough sea. This type of hose is suitable to form dredging pipelines working under impact from huge sea waves for its lower barycentre, high capacity to withstand impact, less specific gravity, reasonable configuration, easy and convenient installation and transportation.

Marine suction self floating hose for dredging can be used in extreme operating conditions and severe fatigue generated by sea motion.

In the stringent applications, marine suction self floating hose for dredging has high flexibility and service life for one year.

Application: Used for port, dock, seawater, silt, sand, discharge flood, oil transportation etc. particularly suited to the work of large storm water construction.



Specifications

1. Inner layer: NBR and SBR, with excellent abrasion resistance and high quality
2. Outer shell: NBR+CR
3. Reinforcement: high tensile strength fabrics
4. Safety factor: 3:1
5. Inner diameter: 10 inch to 52 inch
6. Working pressure: 10-30 bar
7. Length: 11.8 meters/pc or upon request
8. The size of flange as customers' request

Advantages

1. Outer cover with excellent abrasion resistance and UV protection.
2. Inner cover with excellent abrasion resistance and high quality.
3. Wearing colored indicator layer.
4. Independent floating foam; sealing non-absorbent, area above water not less than 20% of total volume.
5. Able to bear the high pressure of work. Ideal working temperature: -20 to 70°C
7. Bending angle: in working condition, the bending angle is from 0° to 45°.
8. Low center of gravity, strong anti-wave ability, good stability.
9. Easy installation, good adhesion, long service life, easy assembly.

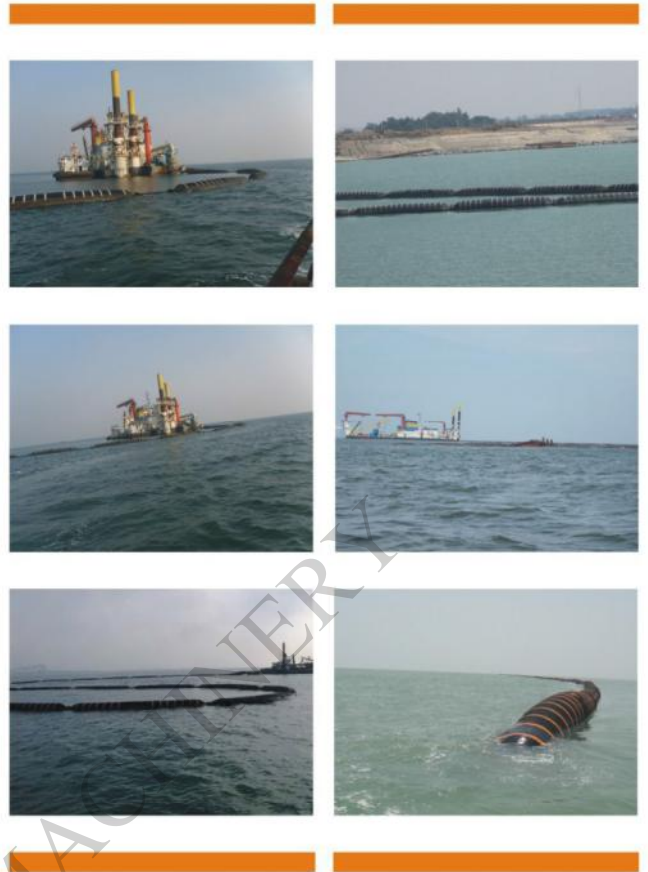




SELF-FLOATING HOSE SIZES

Nominal Inner Diameter(mm)	Flange Outer Diameter(mm)	Flange Thickness (mm)	Rubber Connector Thickness (Reference)(mm)	Bolt Hole			Inner Rubber Layer Thickness (Reference)(mm)
				Flange Circle Diameter(mm)	Number (PC)	Hole Diameter(mm)	
200±3	340 ⁺³ ₋₂	25±2	10	295±1	8	22±1	12
250±3	400 ⁺³ ₋₂			350±1	12	22±1	
300±5	445 ⁺³ ₋₂			395±1	12	22±1	
350±5	445 ⁺³ ₋₂			460±1	16	22±1	
400±5	560 ⁺³ ₋₂			500±1	16	22±1	
450±5	600 ⁺³ ₋₂	35±2	12	560±1	18	22±1	20
500±5	660 ⁺³ ₋₂			612±1	20	22±1	
550±5	700 ⁺³ ₋₂			645±1	20	22±1	
600±5	780 ⁺³ ₋₂			725±1	20	26±1	
650±5	830 ⁺³ ₋₂			760±1	20	27±1	
700±5	960 ⁺³ ₋₂	40±2	14	890±1	24	30±1	35
750±5	985 ⁺³ ₋₂			914±1	28	35±1	
800±5	1060 ⁺³ ₋₂			985±1	24	39±1	
850±5	1120 ⁺³ ₋₂	45±2	18	1020±1	24	33±1	40
900±5	1295 ⁺³ ₋₂			1210±1	28	45±1	
1000±5	1430 ⁺³ ₋₂	50±2	18	1330±1	28	45±1	45
1100±5	1550 ⁺³ ₋₂			1410±1	36	45±1	

Other sizes of self-floating hose can be made upon request



STEEL WIRE REINFORCED PE PIPE

Product Characteristics of Steel Wire Reinforced PE Pipe

1. Its strength, rigidity and shock resistance are higher than that of plastic pipes.
2. Double-faced anti-corrosion: having the same anti-corrosion property with plastic pipes.
3. To improve its heat preservation makes no freezing in winter and no dewing in summer on pipe surface.
4. Pipe's smooth inner wall and no scaling make head loss 30% less than steel pipes.
5. Mature electro fusion connection technique is adopted in pipeline connection; Electrofusion fittings have complete types and specification, with strong resistance to axial tension.
6. Light weight, thus convenient to transport and install; integrated reliability of this pipeline is high; service life can reach 50 years under normal working conditions with diversified pipe connection modes.
7. It is the best substitute of galvanized steel pipes with its low cost, health and non-toxic.

Application Scope of Steel Wire Reinforced PE Pipe

1. Municipal underground wastewater and sewage pipelines
2. Drainage and sewage pipelines in factories and sewage treatment plants
3. Ventilation system pipelines
4. Protection pipeline system
5. Seawater and rainwater transmission pipelines
6. Water gathering and water percolation system
7. Agricultural irrigation water pipelines



Nominal External Diameter of Pipe and Wall Thickness Corresponding to Nominal Pressure

Nominal external diameter (Dn) (mm)		Nominal pressure (MPa)																				
		0.5	1.0	1.25	1.6	2.0	2.5	3.0	3.5	4.0	5.0	6.3	7.0									
Basic Dimension	Limit Deviation	Nominal wall thickness and limit deviation																				
50	+1.2 0				4.5	+1.2 0	5.0	+1.2 0	5.5	+1.5 0	5.5	+1.5 0	5.5	+1.5 0	6.0	+1.5 0	8.5	+1.5 0	9.0	+1.0 0	9.5	+1.0 0
63	+1.2 0				4.5	+1.2 0	5.0	+1.2 0	5.5	+1.5 0	5.5	+1.5 0	5.5	+1.5 0	6.5	+1.5 0	8.5	+1.5 0	9.0	+1.0 0	10.0	+1.0 0
75	+1.2 0				5.0	+1.2 0	5.0	+1.2 0	5.5	+1.5 0	6.0	+1.5 0	6.0	+1.5 0	9.5	+1.0 0	9.5	+1.0 0	9.5	+1.0 0	10.5	+1.0 0
90	+1.4 0				5.5	+1.5 0	5.5	+1.5 0	5.5	+1.5 0	6.0	+1.5 0	6.0	+1.5 0	10.0	+1.0 0	10.5	+1.0 0	10.5	+1.0 0	11.5	+1.0 0
110	+1.5 0		5.5	+1.5 0	5.5	+1.5 0	7.0	+1.5 0	7.0	+1.5 0	7.5	+1.5 0	8.5	+1.5 0	8.5	+1.5 0	11.0	+1.0 0	12.0	+1.5 0	12.0	+1.5 0
125	+1.5 0		5.5	+1.5 0	5.5	+1.5 0	7.5	+1.5 0	8.0	+1.5 0	8.5	+1.5 0	9.5	+1.0 0	9.5	+1.0 0	11.0	+1.0 0	11.0	+1.0 0	12.0	+1.5 0
140	+1.7 0		5.5	+1.5 0	5.5	+1.5 0	8.0	+1.5 0	8.5	+1.5 0	9.0	+1.5 0	9.5	+1.5 0	9.5	+1.5 0	11.0	+1.0 0	11.0	+1.0 0	13.0	+1.7 0
160	+2.0 0		6.0	+1.5 0	6.0	+1.5 0	9.0	+1.5 0	9.5	+1.5 0	10.0	+2.0 0	10.5	+2.0 0	10.5	+2.0 0	11.0	+1.5 0	12.0	+1.5 0	14.0	+1.4 0
200	+2.3 0		6.0	+1.5 0	6.0	+1.5 0	9.5	+1.5 0	10.5	+2.0 0	11.0	+2.0 0	12.0	+2.0 0	12.5	+2.2 0	13.0	+1.2 0	13.0	+1.2 0	15.0	+2.2 0
225	+2.5 0		8.0	+1.5 0	8.0	+1.5 0	10.0	+2.0 0	10.5	+2.0 0	11.0	+2.0 0	12.0	+2.0 0	13.0	+1.2 0	13.0	+1.2 0	13.0	+1.2 0		0
250	+2.6 0	8.0	+1.5 0	10.5	+2.0 0	10.5	+2.0 0	12.0	+2.2 0	12.0	+2.2 0	12.5	+2.2 0	14.0	+1.4 0	14.0	+1.4 0	14.0	+1.4 0	15.0	+2.2 0	
280	+2.6 0	9.5	+1.5 0	11.0	+2.0 0	11.0	+2.0 0	13.0	+2.2 0	13.0	+2.2 0	15.0	+1.5 0	15.0	+1.5 0	17.0	+2.2 0					
315	+2.7 0	9.5	+1.5 0	11.5	+2.0 0	11.5	+2.0 0	13.0	+2.5 0	13.0	+2.5 0	15.0	+1.5 0	15.0	+1.5 0	18.0	+1.6 0					
355	+2.8 0	10.0	+1.8 0	12.0	+1.2 0	12.0	+2.2 0	14.0	+2.5 0	14.0	+2.5 0	17.0	+2.1 0	17.0	+2.1 0	19.0	+2.5 0					
400	+3.0 0	10.5	+2.0 0	12.5	+2.2 0	12.5	+2.2 0	15.0	+2.8 0	16.0	+2.8 0	17.0	+2.8 0	17.0	+2.8 0							
450	+3.2 0	11.5	+2.0 0	13.5	+2.5 0	13.5	+2.5 0	16.0	+2.8 0	18.0	+2.8 0	18.0	+2.8 0									
500	+3.2 0	12.5	+2.2 0	15.5	+2.8 0	15.5	+2.8 0	18.0	+3.0 0	19.0	+3.0 0	22.0	+2.8 0									
560	+3.2 0	17.0	+3.0 0	20.0	+3.0 0	20.0	+3.0 0	18.0	+2.8 0	22.0	+2.8 0											
630	+3.2 0	20.0	+3.0 0	23.0	+3.0 0	23.0	+3.0 0	26.0	+3.0 0	26.0	+3.0 0											
710	+6.4 0	23.0	+3.0 0	26.0	+3.0 0	28.0	+3.0 0	30.0	+3.0 0													
800	+7.2 0	27.0	+3.0 0	30.0	+3.0 0	32.0	+3.0 0	34.0	+3.0 0													
900	+8.1 0	29.0	+3.0 0	33.5	+3.0 0	35.0	+3.0 0	38.0	+3.0 0													
1000	+9.0 0	34.0	+3.0 0	37.0	+3.0 0	40.0	+3.0 0															

RUBBER HOSE PIPE

Discharge Rubber Hose

Discharge rubber hose is a kind of tubular rubber products used to transport water & sand. It is composed of internal and external rubber cover and the skeleton layer. The material of skeleton layer can use cotton fiber, synthetic fiber, carbon fiber, asbestos and steel wire, etc. The material of inner and outer rubber layer can be natural rubber, styrene-butadiene rubber, butadiene rubber and so on.

There are two kinds of dredging rubber hoses—discharge rubber hose for water & sand discharge and suction rubber hose for water & sand suction.

Application of discharge rubber hose

Used for port, dock suction and discharge seawater, silt, sand, discharge flood, oil etc.
Working Temperature: From -35°C up to +80°C.

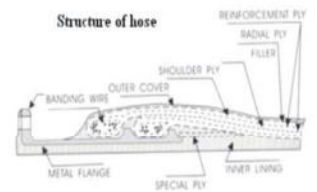


Physical Index

Testing Item	National Standard of Hose Lining	Standard of the Company
Tensile Strength at Break (Mpa)	>12	>15
Elongation at Break %	>400	>500
Akron Abrasion cm ³ /1.6km	<1	<0.8
Shore Hardness		63±3
Bending Radius (mm)		90-1200

Hose Inner Diameter: 100mm-1000mm, Working Pressure: 5-30 bar, Length: 1-10 meters/piece

It is used for connecting with dredging PE pipe or steel pipe, to reduce the swaying which is caused by waves, so that medium can flow smoothly in the pipeline.



Hose I.D. (mm)	Length (Meter)	Working Pressure
200	1-10	5-30 bar
250	1-10	5-30 bar
300	1-10	5-30 bar
350	1-10	5-30 bar
400	1-10	5-30 bar
450	1-10	5-30 bar
500	1-10	5-30 bar
550	1-10	5-30 bar
600	1-10	5-30 bar
650	1-10	5-30 bar
700	1-10	5-30 bar
750	1-10	5-30 bar
800	1-10	5-30 bar
850	1-10	5-30 bar
900	1-10	5-30 bar

Other sizes of hose can be made upon request.

Suction Rubber Hose

Structure

1. Tube: Black abrasion resistant Natural Rubber
2. Reinforcement: Multiple plies of polyester fabric with a spring steel helix wire.
3. Cover: Neoprene

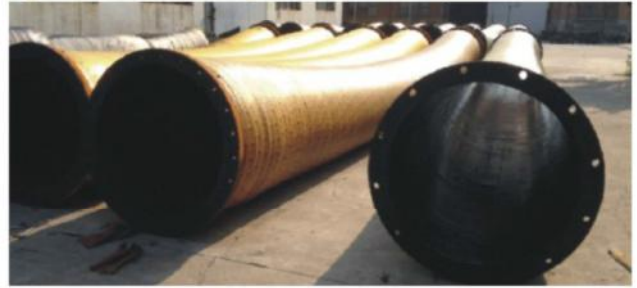


Hose I.D.		Working Pressure (bar)	Length (Meter)	Wall Thickness (mm)
mm	Tolerance (mm)			
250	±2	10-30	1-10	31-32
300	±2		1-10	34-37
414	±2		1-10	35-37
500	±2		1-10	35-40
560	±3		1-10	40-45
600	±3		1-10	40-45
650	±3		1-10	40-45
700	±3		1-10	40-45
750	±3		1-10	45-50
800	±4		1-10	50-52
850	±4	1-10	50-55	
900	±4	1-10	55-58	

Other sizes of suction rubber hose can be made upon request

Suction Rubber Hose is used with dredger for silt/gravels conveyance. It sucks up the mixture of silt and water using negative pressure. Mostly used with these hoses are the rubber flange/steel backing flange and the double action flange. They can be supplied in any size, depending on application, with 100% vacuum capability and high implosion pressures. For use with gimbals and in the ladder of cutter dredgers we can equip them with small bending radius suction hoses.

Big Bore of Suction/Discharge Rubber Hose for Projects



Inner Diameter: 50mm-1000mm, Working Pressure: 6-20 bar, Max. Length: 10 meters/piece, Other sizes of hose can be made upon request.

This hose can be used for projects of dredging, mine, oil, water, sand, mud, etc.

It can be connected with MDPE Floater and floating on sea or river. It can be saved more money than self-floating hose.

Oil Suction & Discharge Hose and Tank Truck Hose



Application

Oil suction and discharge hose is designed for sucking and conveying most commercial gasoline, LP gas, crude oil, diesel fuels, and other petroleum products where heavy duty diameter hose is required.

Construction

Tube: Synthetic rubber resisting the deteriorating effects of petroleum products, not discolor fluids.

Reinforcement: multiple high strength tire cords with steel wire which helixed in rubber. This prevents the build-up of static electricity.

Cover: Oil and abrasion and weather resistant synthetic rubber, corrugated cover or smooth cover

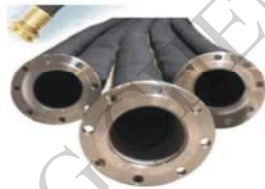
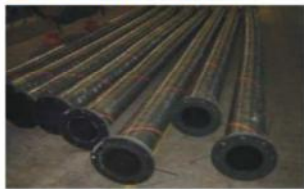
Hose end fitting: With optional metal flange joints or cam lock couplings and hose clamps.

Specification

Working Temperature: -30°C to +90°C

Hose Inside Diameter	from 25mm(1") to 1200mm(48")
Hose Working Pressure	from 1 bar to 20 bar
Hose Length	1-10 meters or upon your request
Hose End Fitting	upon your request

Bulk Material Handling Hose



Application

Mainly used in the mining industries and sewerage for all abrasive applications including ore slurry, coal, sand & gravel, mud, sewage, water, tailing lines, cement and fly ash, concrete etc.

Construction

This consists of abrasion resistant inner tube, multiple plies of high strength tire cord with steel wire steel wire helix reinforced layer, synthetic rubber cover and metal flange joints. The cover of the hose is also compounded to provide excellent resistance to weathering, abrasion and ozone, more important it can be anti static.

Temperature: -30°C to +90°C

Specification

Hose Inside Diameter	from 25mm(1") to 1200mm(48")
Hose Working Pressure	from 1 bar to 20 bar
Hose Length	1-10 meters or upon your request
Hose End Fitting	upon your request

Water Suction & Discharge Rubber Hose



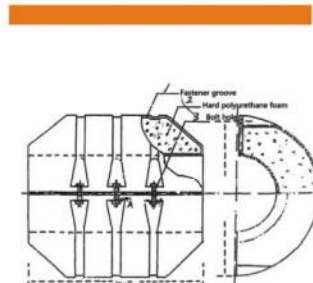
Designed to meet almost all water hose applications, especially designed for use in construction, mining, industrial and agriculture service. It is flexible and withstands high vacuum.

Hose Inside Diameter	from 25mm(1") to 1200mm(48")
Hose Working Pressure	from 1 bar to 20 bar
Hose Length	1-10 meters or upon your request
Hose End Fitting	upon your request

FLOATER

The hull of pipe floater is made from medium density polyethylene material with excellent flexibility, filled with high strength polyurethane foam inside. With reasonable structure and good performance, the MDPE floater becomes the ideal substitution of the traditional steel floater for the dredging pipes.

No.	Structure Name	Material
1	Polyethylene Hull	Polyethylene
2	Hard Polyurethane Foam	Closed-cell Polyurethane
3	Steel Bolts & Nuts	Metal



Main Technical Parameter

Item	Case Function Target	Item	Internal Function Target
Raw Material	Linear Polyethylene Resin	Filling Material	Polyurethane Foam
Tensile Strength	≥12Mpa	Water Absorption	0.18-0.2g/100cm ³
Elongation at Breaking	≥10%	Breaking Strength	0.18-0.24Mpa
Lash Intensity	≥31.4KJ/m ²	Elongation at Breaking	4-6%
Bending Strength	≥15.7Mpa	Compression Strength	0.10-0.24Mpa
		Heat-resistance	-60°C-80°C

Features

1. Good flexibility, excellent impact resistance, anti-wave, particularly suitable in the open sea.
2. Light weight, easy for installation and movement, with much lower transportation cost.
3. Higher corrosive resistance, anti-UV, anti-aging, longer working life, three times longer than steel floater.
4. High buoyancy and low absorption rate.
5. Lower cost, the cost and performances are much better than steel pontoons.
6. Special grooves greatly increase the service life of the floaters.
7. It can be used from -60℃ to 80℃.

New Design

1. Traditional PE floaters are added positioning grooves in the surface to improve their ability to fight the wind and wave.
2. PE floaters are also added stainless steel pipes in screw holes to reduce the friction between floaters and screws. The improvement greatly improve the service life of PE floaters.

Application

It is mainly used in laying the pipes on the water for dredger, dredging pipeline projects etc. in the sea, lake or river.



The Sizes of Pipe Floater

Floater I.D.(mm)	Floater O.D.(mm)	Floater Length(mm)	Floater Thickness(mm)	Floater Buoyancy (kg)
220	500	800	7	200
300	700	1200	7	420
375	1100	1100	7	920
414	1100	1200	8	1020
430	1200	1200	8	1200
480	1300	1300	8	1500
580	1400	1550	9	2219
630	1400	1700	11	2400
680	1480	1800	11.5	2930
730	1600	1900	12	3593
780	1600	2000	13	3800
830	1800	2000	14	4800
880	1800	2200	15	5140
940	2200	2500	16	8180

Other sizes of floater can be made upon request

