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东宏管业
DONGHONG PIPE INDUSTRY

State-Level High-Tech Enterprise / National Enterprise of Keeping Promise & Honoring Contracts
Brand Product of Shandong Province / Leader of China mining pipe
Top 10 China pipe manufacturers

Brand
Strength

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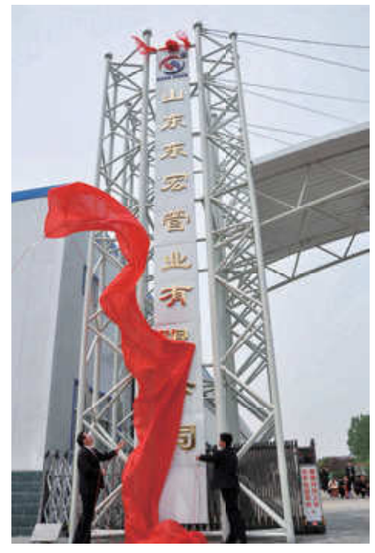
DONGHONG PIPE INDUSTRY

Contents



1 COMPANY STRENGTH

Donghong Pipe Industry is a large-scale R&D and manufacturing and equipment base of plastic composite pipe system and specializes in manufacturing pipes and pipe fittings and raw material serial products for mining, gas supply, oil field, electric power and heating power, infrastructure and civil use. It is also an executive member of China Plastics Piping Association, China City Gas Association and Association of Shandong Coal Mine Equipment Industries.

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Company Profile

Donghong Pipe Industry is a large-scale R&D and manufacturing and equipment base of plastic composite pipe system and specialized in manufacturing pipes and pipe fittings and raw material serial Products for mining, gas supply, oil field, electric power and heating power, infrastructure and civil use. It is also an executive member of China Plastics Piping Association, China City Gas Association and Association of Shandong Coal Mine Equipment Industries.

The Company has already passed ISO 9001 International Quality Management System Certification and ISO 14001 Environment Management System Certification and Xinhua Water Saving Product Certification of Ministry of Water Resources. Donghong Brand is identified as "China Famous Brand" and "Famous Brand of Shandong Province" by the State Administration of Industry and Commerce. Donghong pipe series are identified as "National Inspection-Free Product" and "Brand-Name Product of Shandong Province". Donghong Pipe Industry is affirmed as the State-Level High-Tech Enterprise, National Enterprise of Keeping Promise & Honoring Contracts, China Patent Shandong Star Enterprise, Provincial Customers Satisfaction Unit, and Credit Rating AAA Enterprise of China Plastics Processing Industry Association and is honored with Mayor Quality Management Prize of Jining City as well as other awards. The Science Research Central held by it is designated as Provincial Engineering Research Center.

Donghong has approximate one thousand varieties and the leading products are: steel wire reinforced PE pipe for mining, spirally welded corrugated composite steel pipe with PE/Epoxy coating for mining, PE/Epoxy coated steel pipe for underground mining, PE pipe for mining, PE enwound structure-wall gas-drainage pipe for mining, PE pipe for gas supply, steel wire reinforced PE composite pipe for gas supply, PE pipe for water supply, steel wire reinforced PE composite pipe for water supply, PE/Epoxy coated steel pipe for water supply, Corrugated steel stripe reinforced PE pipe for underground sewage, PP-R water supply pipe, PP-R aluminum stable composite pipe, PE-RT floor heating pipes, electro-fusion pipe fittings, thermo-fusion pipe fittings, welded pipe fittings, steel pipe fittings and various connecting pipe fittings as well as auxiliaries. As for the mining serial products, steel wire reinforced PE composite PE used in the underground mine obtains the first National "3.5Mpa" and "-0.097Mpa" Mining Safety Signs Certificate and is worthy of the leader of China mining pipes. To guide the industrial development, the Company invests heavily constantly and develops the new pipe system which represents the international integration. Several scientific achievements fill the blank of the industry both domestic and abroad which made Donghong the biggest manufacturing base of steel reinforced composite pipe in the world.

As one of the Top-Ten enterprises in China pipe industry, a leader of China mining pipe and the biggest manufacturing base of steel wire reinforced PE composite pipe in the world, Donghong assumes such three major tasks as enhancing capacity of independent innovation, improving development quality and fulfilling its social responsibility. It sticks to the concept that technology position determines market position and market position determines enterprise position, and to the synchronous accumulation of capital, technology, talents and culture, as well as to take technology and management innovation as its fundamental driving force. It will build "Donghong", the world leading brand of new composite pipe, more splendid.

Equipments

09/10

TO DO A GOOD JOB, ONE MUST FIRST SHARPEN ONE'S TOOLS

State-of-the-art production equipment is the guarantee of excellent quality

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DONGHONG PIPE INDUSTRY

Equipments

The biggest manufacturing base of steel wire reinforced composite pipe in the world

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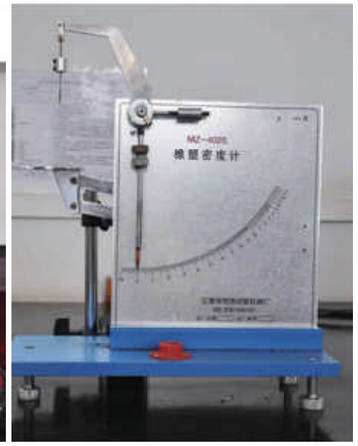
Quality Control

Engineering Research Center for Polymer Composite Pipe of Shandong Province

Approved by Department of Science and Technology of Shandong Province, the Project Research Center for Polymer Composite Pipe of Shandong Province is the first domestic pipe engineering research center which relies on Shandong Donghong Pipe Industry Co., Ltd. It mainly researches on plastic composite pipe which is the combination of plastic and metal and non-metallic materials, and also analyses the relevant fields such as production equipment and various connection modes at the same time. It follows the international technology development trend of plastic composite pipe closely, making R&D of new products with market prospect as the leader and analysis of high value-added product as the precursor and high-tech research and industrialization development as the main part and R&D of new technology and process as the focus so as to build the research team with continuous innovation capacity for international science and technology competition so as to promote the technology development of plastic composite pipe both domestic and abroad.

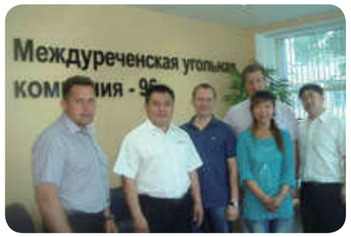
Build pipeline engineering

No.1 Chinese Safety Brand



Marketing Network

Donghong sticks to the concept of client orientation over the years.



Donghong mining pipe played an important role in the rescue of Wangjialing Coal Mine and was well received by the clients.

Serve the public with **honesty** and meet the challenges with **strength**

Accomplish future with **confidence** and create the brand with **quality**

2 PRODUCTS

Donghong has approximate one thousand varieties and the leading products are: steel wire reinforced PE pipe for mining, PE pipe, PE/Epoxy coated steel pipe, spirally welded corrugated steel pipe with PE/Epoxy coating, PE enwound structure-wall gas-drainage pipe for mining, corrugated steel stripe reinforced PE pipe for underground sewage, PP-R water supply pipe, PP-R aluminum stable composite pipe, PE-RT floor heating pipes, electro-fusion pipe fittings, thermo-fusion pipe fittings, welded pipe fittings, steel pipe fittings and various connecting pipe fittings as well as auxiliaries.

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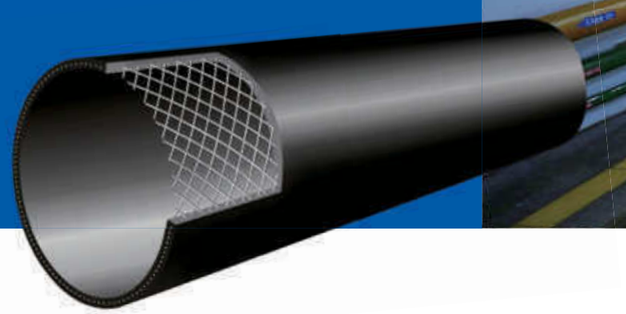
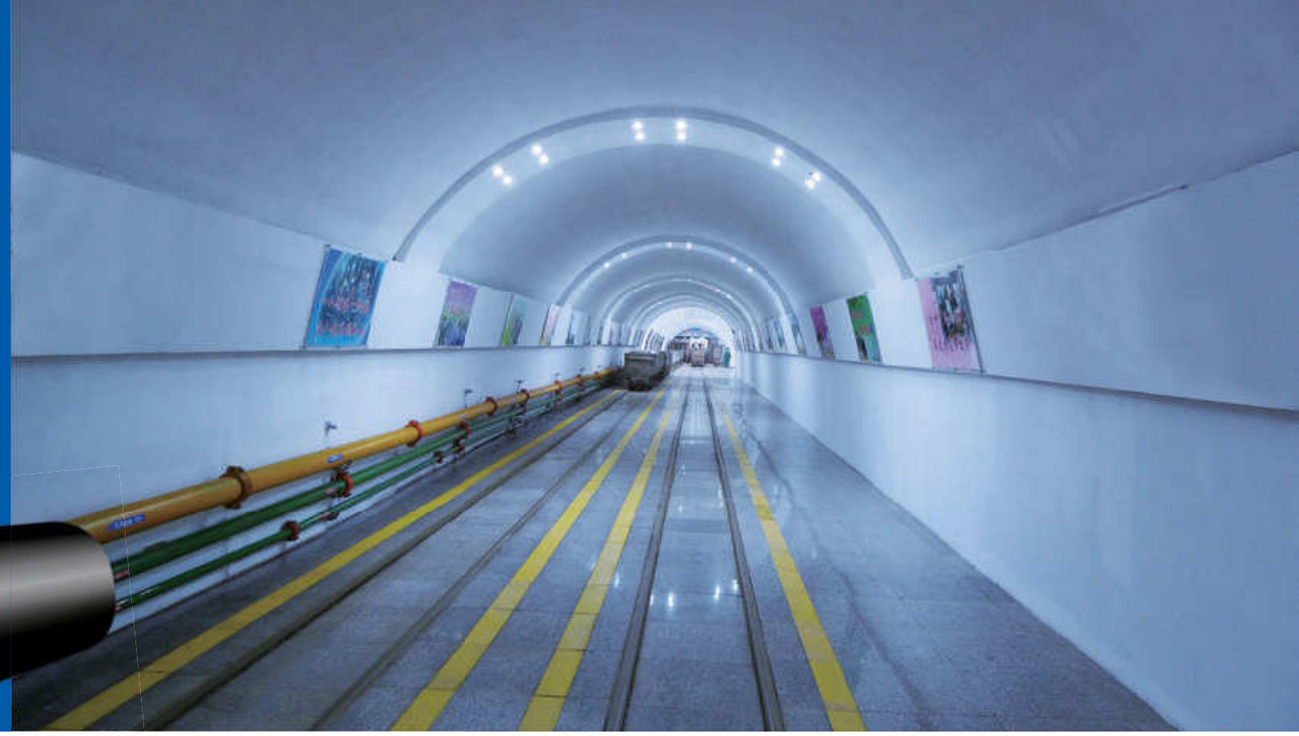
Mining Products

Steel wire reinforced PE pipe for underground mining

19/20





Product Introduction

This product is mainly used for mining water supply and drainage, air compression, mining guniting pipe and gas-drainage.

Product Features

The external wall is smooth and neat and is free from air bubbles and cracks. The pipe is uniform in color, the ends of which are cut smooth and neat.

Quality Assurance

The mining steel wire reinforced PE composite PE pipe of Donghong is equipped with superior physical properties and long-term hydrostatic strength. It obtained the first Pipe Maximum Pressure "3.5 MPa" Certificate and "-0.097 MPa Safety Certificate of Approval for Coal Mining Products" which are issued by Mining Products Safety Approval and Certification Center. The pipe system may be safely used for over 50 years.

Execution Standards: CJ/T 189-2007 and Q/DHSY 01-2008

Performance Features

- **Light weight, long service life, quick and convenient for construction**

The steel wire reinforced PE pipe used in the underground mine is light weighted with a service life 8-10 times of that of the steel pipe.

- **Strong corrosion resistance, high pressure-bearing, outstanding mechanical properties**

The steel wire mesh reinforced polyethylene pipe used in the underground mine is equipped with strong resistance of acid and alkali and outstanding mechanical properties. It has superior strength, stiffness and anti-impact property to those of the plastic pipe. In addition, it is equipped with high pressure-bearing so as to solve the problems of poor stiffness and pipe sagging of mining polyethylene pipe and can be widely used in pipe auxiliary engineering under various conditions.

- **Low conveyance noise**

The flowing noise is reduced greatly because of the smooth pipe wall with high surface smoothness and small fluid resistance.

- **Satisfactory leak tightness**

The pipe is equipped with satisfactory leak tightness after connection and is free from leakage in bulge test.

- **Easy installation**

Self-developed connecting pipe fittings (which has applied for patent) is convenient and fast. It has no need for any corrosion resistance and welding in installation so as to reduce the construction difficulties under special or complex conditions and save large amount of construction costs. Its comprehensive economic benefits are 8-15 times of that of the steel pipe.

- **Satisfactory flame retardant and antistatic property**

The flame retardant and antistatic properties comply with national standards and are applicable for specific places which are inflammable and explosive.

Connection Modes

Electro-fusion flange connection

Thermo-fusion socket welding flange connection

Steel jacket flange connection

Steel jackets(with inner jacket) connection

Direct crimp flange connection

Steel jacket clamp connection

Steel jacket(with inner jacket) clamp connection

Crimped steel jacket flange connection

Double-sealed flange connection

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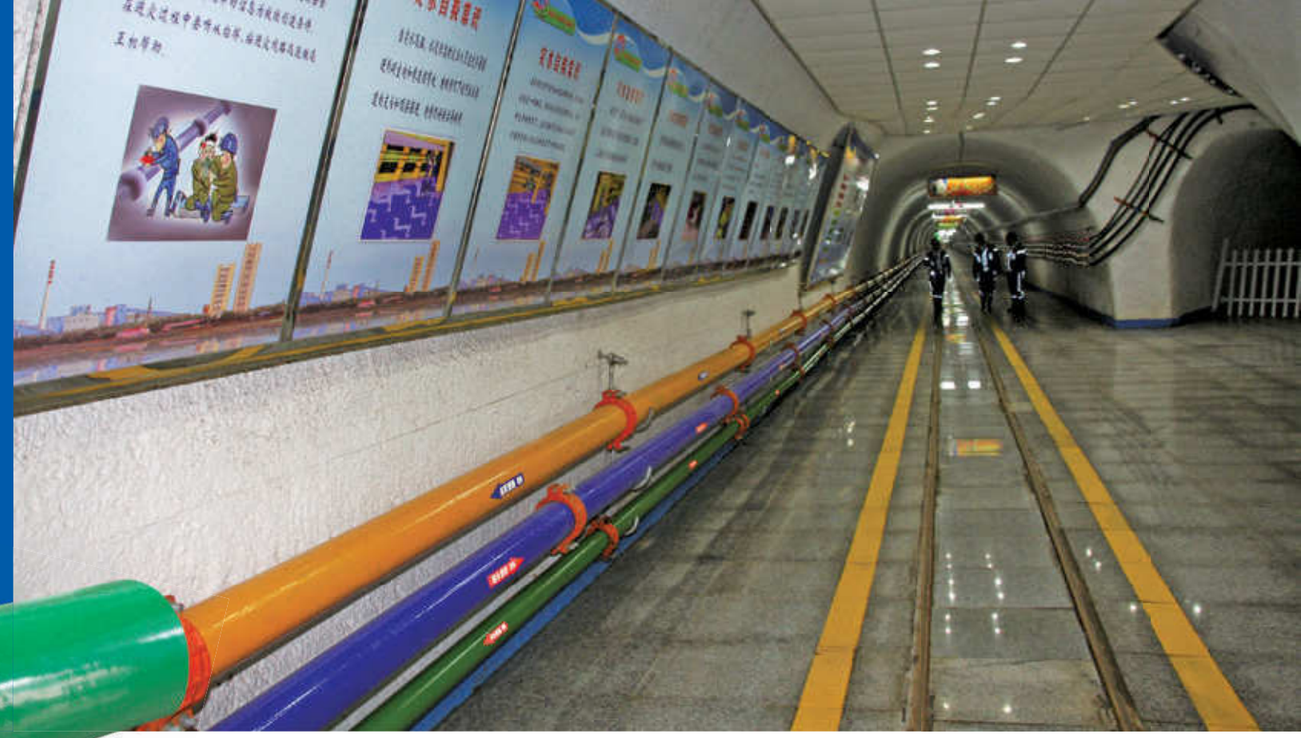
DONGHONG PIPE INDUSTRY

Mining Products

Steel mesh reinforced PE composite pipe for mining

21/22



Nominal external diameter of pipe and wall thickness corresponding to nominal pressure

Nominal external diameter(dn)/mm		Nominal pressure/MPa											
		0.8	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	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	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	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	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	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		
250	+2.5 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 +2.8 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	22.0 +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									

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Mining Products

Steel mesh reinforced PE composite pipe for mining

23/24

Product Introduction

They are mainly used in the underground mine. The products are divided into mining water pipe, mining air pipe, mining guniting pipe and mining gas drainage pipe. The product quality complies with Nation Coal Industry Standard MT 558.1-2005.

Product Features

The external wall of mining polyethylene pipe is smooth and neat and is free from air bubbles and cracks and is uniform in color.

Application Fields

The product is mainly used in fields such as water supply, drainage, air compression, guniting and gas drainage in the underground mine.

Performance Features

● Light weight, long service life, quick and convenient for construction

The mining polyethylene pipe is light weighted and is only 1/8 of that of the steel pipe with and its service life is 8-10 times of that of the steel pipe.

● Strong corrosion resistance, outstanding mechanical properties

The mining polyethylene pipe is equipped with strong resistance of acid and alkali and outstanding mechanical properties and superior water-pressure resistance, external-pressure resistance and impact resistance so as to be widely used for pipe auxiliary engineering under various conditions.

● Low noise

The flowing noise is reduced greatly because of the smooth pipe wall with high surface smoothness and small fluid resistance.

● Satisfactory leak tightness

The pipe is equipped with satisfactory leak tightness after connection and is free from leakage in bulge test.

● Easy installation

It has no need for any corrosion resistance and welding in installation so as to reduce the construction difficulties under special or complex conditions and save large amount of construction costs. Its comprehensive economic benefits are 8-15 times of that of the steel pipe.

● Satisfactory flame retardant and antistatic property

The flame retardant and antistatic properties comply with national standards and are applicable for specific places which are inflammable and explosive.

Connection Modes

Electro-fusion flange connection

Butt welding flange connection

Thermo-fusion socket welding flange connection

Steel jacket flange connection

Steel jacket clamp connection

Thread connection

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DONGHONG PIPE INDUSTRY

Mining Products

PE/Epoxy coated steel pipe for underground mining

25/26

Product Introduction

The PE/Epoxy coated steel pipe for underground mining is a composite product equipped with antistatic, flame retardant and anti-corrosive performance which is manufactured by coating the internal and external surface of the pipe with a special molding powder polyethylene epoxy resin powder after its special process treatment. The product overcomes the various defects such as easy rusty and corrosion, high level of pollution,easy deformation and low strength of plastic pipe, and integrates the common advantages of steel pipe and plastic product. It belongs to the important popularized energy saving and environment-friendly products in China. The product may be widely used for water supply and drainage, gas drainage, ventilation and guniting in underground mine.

Execution Standards

MT 181-1988 Safety Performance Inspection Specifications for Plastic Pipe Used in the Underground Mine

CJ/T 120-2008 Steel Pipe with Plastic Coating for Water Supply

Q/DHSY 04-2010 Composite Steel Pipe with Polyethylene Coating Used in the Underground Mine

AQ 1043-2007 Mining Products Safety Label

Performance Features

● High pressure-bearing, outstanding mechanical properties of steel pipe

The mining composite pipe is equipped with the advantages of steel pipe and high mechanical strength and pressuring-bearing capacity for foreign influences such as shock bending.

● Strong chemical corrosion resistance

The mining composite pipe has advantages of both steel pipe and plastic pipe. The plastic coating is equipped with strong chemical corrosion resistance so that pipe is applicable for conveying corrosive fluid containing sulfur, calcium, magnesium and other medium in the underground mine. The product may be equipped with various pipe fittings such as flange coating, Tee and elbow after anticorrosive treatment of their internal and external coating so as to ensure the corrosion resistance effect of the entire pipe.

● Strong Coating adhesion

The mining composite pipe adopts special physical treatment with pretreatment reaching Sa 2.5 Standard. The scientific and appropriate process and advanced equipment ensure the coating quality and the adhesion is superior to national standards.

● Free from scaffolding and scaling, small fluid resistance

The mining composite pipe is free from scaffolding and scaling because of the dense internal surface coating. The friction coefficient and roughness degree are less than those of the ordinary steel pipe. It belongs to the economic and environmental-friendly products with higher cost performance.

● Flame retardant, antistatic

This product adopts special polyethylene or epoxy powder which is antistatic and flame retardant. The plastic coating distributed on the surface and inner layer of the pipe in uniform and fully complies with the requirements of MT 181.

● Various connection modes and convenient for construction

This product may adopt connection modes such as quick joint and flange for simple installation and reliable performance.

● The internal and external coating may adopt different coating materials and colors according to user requirements.

Main coating methods are internal and external polyethylene coating, internal and external epoxy coating and internal epoxy and external PE as well as other plastic coating processes.

Mining Products

PE/Epoxy coated steel pipe for underground mining

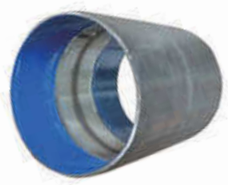
Performance Requirements

Item		Technical specifications	
Appearance		The internal and external plastic coating is smooth, free from such defects obstructing utility as cracks, needle holes and foreign substances adhesion and equipped with practical straightness as well.	
End face verticality		Both ends are cut smoothly and neatly and are vertical to axis; the end face verticality shall be 90° ±1° .	
Coating thickness, mm		Polyethylene	0.6 ~ 2.0
		Epoxy resin	> 0.45
Hydrostatic test		Pressure stabilization time shall not be less than 5s, and no leakage under test pressure.	
Surface resistance		$\leqslant 1*10^6$	
Alcohol blast burner combustion	Flaming combustion	Average value	⩽ 3
		Maximum value	⩽ 10
	Flameless combustion	Average value	⩽ 20
		Maximum value	⩽ 60

Connection Modes

Welded steel flange connection of pipe ends

Grooved clamp connection



Double metallic welded connection

Double-sealed welded connection

Shoulder clamp connection

Mining Products

Spirally welded corrugated composite steel pipe with PE/Epoxy coating for mining

29/30

Product Introduction

The spirally welded corrugated composite steel pipe with polyethylene (epoxy) coating used in the underground mine is a new kind of plastic-steel composite pipe which is invested heavily by Donghong, Chinese Academy of Sciences and Qingdao University of Science & Technology and is developed after years of research. This product has applied for multiple patents. It is equipped with both steel pipe features and its own high-Performance Features (antistatic property, flame retardant property and high strength). This product adopts high strength steel mesh with special structure as the reinforcement and is covered with self-developed new glue bond agent double-side which is antistatic and flame retardant. Since the reinforcements are clad in continuous thermosetting plastic, this type of composite pipe not only overcomes the disadvantages of steel pipe and plastic pipe respectively but also is equipped with the common advantages of the former two. It is a revolutionary technical achievement to solve gas drainage and air compression pipe in coal mine and to create the age of mining high-tech pipe. In addition, it is a pipe with large diameter which is urgently required by such fields as petroleum, chemical industry, pharmacy, food and gas. This product is mainly applied for gas drainage (KW), water supply and drainage(KS) ,guniting (KJ), positive draft (KFZ) , induced draft (KFF) and general pipe (KM) used in the under ground mine.

Performance Features

● Light weight; long service life; quick and convenient for construction.

This product is light weighted and its service life is 10-15 times of that of the steel pipe.

● Strong corrosion resistance, high pressure-bearing, outstanding mechanical properties

The mining plastic-steel composite pipe has advantages of both steel pipe and plastic pipe. The plastic coating is equipped with strong chemical corrosion resistance so that pipe is applicable for conveying corrosive fluid containing sulfur, calcium, magnesium and other medium in the underground mine.

● Low convey noise

The flowing noise is reduced greatly because of the smooth pipe wall with high surface smoothness and small fluid resistance.

● Satisfactory leak tightness

The pipe is equipped with satisfactory leak tightness after connection and is free from leakage in bulge test.

● Easy installation

Self-developed connecting pipe fittings (which has applied for patent) is convenient and fast. It has no need for any corrosion resistance and welding in installation, which reduces the construction difficulties under special or complex conditions and saves large amount of construction charges. Its comprehensive economic benefits are 8-15 times of that of the steel pipe.

● Satisfactory flame retardant and antistatic property

This product adopts self-developed new glue bond agent which is flame retardant and antistatic with high strength and strong adhesion and integrates various imported chemical materials and utilizes the state-of-the-art production equipment abroad. By introducing the state-of-the-art production process of U.S. DuPont after modification, it integrates with glue bond agent with the reinforced steel reinforced with special structure. It is a corrosion resistance glue bond agent with high science and technology content and equipped with special performance.

● Strong Coating adhesion

The mining composite pipe adopts special physical treatment with pretreatment reaching Sa 2.5 Standard. The scientific and appropriate process and advanced equipment ensure the coating quality and the adhesion is superior to national standards.

● Good detectability

The buried plastic-steel composite steel may be located with general magnetic detector because of the existence of steel mesh with special structure so as to avoid damage caused by other excavation which is the most damage to pure plastic pipes and other non-metallic pipes.

● The internal and external coating may adopt different coating materials and colors according to user requirements.

Main coating methods are internal and external polyethylene coating, internal and external epoxy resin coating and internal epoxy resin and external PE as well as other plastic coating processes.

● Others

The main part of this pipe is spirally welded corrugated steel pipe with pipe strength equivalent to that of the steel pipe whose wall thickness is 6 times of that of this pipe. Therefore, its strength is greatly larger than that of common plastic pipe. Meanwhile, the pipe is light weighted to facilitate handling and installation which is more quickly and safer in the underground mine. Since gas is inflammable and its flame retardant index is vital, the PE coating flame retardant index of this pipe is 10 times of international standard so that the fire is went out when the pipe is kept away from fire. Its antistatic index is 1000 times of international standard so as to avoid potential safety hazard caused by combustion and static. Equipped with PE and epoxy coating, this pipe has no need for corrosion resistance in mine and is free from post-maintenance and saves corrosion resistance charges. It has a service life of 20-50 years which reduces the comprehensive cost of the mine.

Mining Products

Spirally welded corrugated composite steel pipe with PE/Epoxy coating for mining

Technical Performance

● Safety performance

Flame retardant :

The time average in flaming combustion is less than 3.00s, the maximum value is less than 1000s;

The time average in flameless combustion is less than 20.00s, maximum value is less than 60.00s;

Antistatic:

Average value of internal surface resistance is less than 1.0*106 Ω;

Average value of external surface resistance is less than 1.0*106 Ω

● Physical property

Item	Index
Ring stiffness	> SN16
Anti-impact property	The impact resistance test is carried out with a 6.3kg hammer dropping from a height of 1.0m. At least 9 out of 10 pipes tested are free from cracks or damage and coating stripping or fracturing.
Peel strength	⩾ 70 N/cm
Nominal pressure	⩽ 1.0 MPa
Vacuum pressure	⩾ −0.097 MPa

Product dimension and nominal pressure

Item	Nominal bore diameter DN/ID	Minimum average bore diameter d_{min}	Maximum pitch P_{max}	Minimum steel thickness t_{min}	Nominal pressure MPa	Thickness of internal and external coating
1	160	146	35	1.0	1.0	Internal coating > 0.45mm External coating > 0.5mm
2	200	196	35	1.0	1.0	
3	225	221	45	1.0	1.0	
4	250	246	45	1.2	1.0	
5	315	294	55	1.2	1.0	
6	355	350	65	1.2	1.0	
7	400	392	65	1.5	1.0	
8	450	442	75	1.5	1.0	
9	500	490	75	1.8	1.0	
10	560	548	85	1.8	1.0	
11	630	618	85	2.0	1.0	
12	710	693	110	2.0	1.0	
13	800	785	120	2.2	1.0	
14	900	885	135	2.2	1.0	
15	1000	985	150	2.2	1.0	

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DONGHONG PIPE INDUSTRY

Mining Products

Stainless spirally corrugated composite pipe
Galvanized spirally corrugated composite pipe

33/34

Product Introduction

The spirally corrugated pipe adopts high strength steel skeleton with special structure as its substrate and is manufactured by rolling different corrugated structures on the steel plate with self-developed forming unit and spirally folding and seaming welding. It has such advantages as light weighted, satisfactory stiffness, small friction coefficient and simple connection. The forming pipe adopts stainless steel or galvanized steel and is the optimum selection for pipe products such as gas-drainage pipe and air compression pipe.

Performance Features

● Light weight:
It is 30% lighter than the pipe with identical specification so as to reduce labor intensity and improve construction efficiency.

● High ring stiffness:
Ring stiffness is generally used as a anti-impact property index of non-pressure pipe or negative pressure pipe. If the index is too small, the pipe will be damaged because of deformation or buckling instability. To ensure the anti-impact property of the pipe, the ring stiffness of this product which is obtained by tests is above SN 16.

● Corrosion resistance:
Corrosion resistance of stainless steel spirally corrugated pipe is strong, the corrosion resistance service life of galvanized spirally corrugated pipe is much longer than that of any other coating materials.

● Convenient for installation and connection:
Self-developed connecting piece is convenient and effective which has no need for additional welding and corrosion resistance so as to reduce construction difficulties under special or complex conditions and save large amount of construction costs.

Application Scope

The pipe is applicable for water supply and drainage pipe (KS), positive draft pipe (KFZ), induced draft pipe (KFF) gas drainage pipe (KW) and general pipe (KM) used in the underground mine.

Table of technical parameters of steel strips corrugated pipe

Steel series	Minimum bore diameter	Corrugated form (thread pitch*peak)	Theoretical external diameter
DN200	200 ± 2mm	42*7mm	214mm
DN250	250 ± 2mm	42*7mm	264mm
DN300	300 ± 2mm	42*7mm	314mm
DN350	350 ± 2mm	42*7mm	364mm
DN400	400 ± 2mm	39*10mm	420mm
DN450	450 ± 2mm	39*10mm	470mm
DN500	500 ± 2mm	39*10mm	520mm
DN600	600 ± 2mm	40*16mm	632mm
DN700	700 ± 2mm	40*16mm	732mm
DN800	800 ± 2mm	40*16mm	832mm

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DONGHONG PIPE INDUSTRY

Products for Gas Supply

PE pipe for gas supply

35/36

Product Introduction

PE gas pipe has such features as corrosion resistance, light weight, high-efficient and energy-saving for production and usage, convenient for installation and storage and transportation, and recyclable. It belongs to the chemical building material advocated by China.

Pipe Standard

The production and inspection of PE gas pipe of the company complies with the requirements of National Standard Buried Polyethylene (PE) Piping Systems for the Supply of Gaseous Fuels (GB 15558.1-2003) .

Pipe Color

The PE gas pipes manufactured by the Company are black with yellow stripes or yellow. They can also be determined through the negotiation between the supplier and the purchaser.

Performance Features

● Corrosion resistance

Polyethylene (PE) is inert material. Except for a few strong oxidants, it may resistant corrosion of various chemical mediators. It has no electrochemical corrosion and has no need for the protective coating.

● Free from leakage

PE fuel gas pipelines are mainly connected by electro-fusion connection which integrates the pipeline system. Compare with rubber seal joint or other mechanical joints, there is no risk of leakage caused by joint distortion.

● High toughness

PE gas pipe is equipped with high toughness and elongation at break is generally above 500%. It has a strong adaptive capacity for non-uniform settlement and an excellent anti-seismic capacity.

● Excellent Flexibility

PE gas pipe with small diameter may be reeled and provided with greater length so as to save large amount of joints and pipe fittings. It may be used for trenchless installation. The direction of PE gas pipe can be changed easily according to the requirements

Technical requirements of PE gas pipe

Item	Technical requirements :	
Appearance	The internal and external pipe surfaces shall be smooth and neat and free from such defects as air bubbles, obvious scratches, deboss, impurities, color non-uniform. Ends shall be cut smoothly and neatly and be vertical to tube axis.	
Thermal stability (200℃).min	> 20	
Elongation at break . %	⩾ 350	
Longitudinal reversion (110℃).%	⩽ 3	
Melt flow rate (MFR).(190℃ .5kg)g/10min	MFR change rate before and after processing < 20 %	
Hydrostatic strength	PE80	(1) 20℃，Ring stress 9.0Mpa, Time to break ⩾ 100h (2) 80℃，Ring stress 4.5Mpa, Time to break ⩾ 165h (3) 80℃，Ring stress 4.0Mpa, Time to break ⩾ 1000h
	PE100	(1) 20℃，Ring stress 12.4Mpa, Time to break ⩾ 100h (2) 80℃，Ring stress 5.4Mpa, Time to break ⩾ 165h (3) 80℃，Ring stress 5.0Mpa, Time to break ⩾ 1000h

Products for Gas Supply

Steel wire reinforced PE composite PE for gas supply

37/38

Product Introduction

The serial products adopt high strength plastic-steel wire as reinforcements and are new composite pipes with composite thermoplastic on both internal and external layers with medium, high and low pressure. Since the reinforcements are clad in the continuous thermoplastic, this type of composite pipe not only overcomes the disadvantages of steel pipe and plastic pipe respectively but also is equipped with the common advantages of the former two. They are the initial choice of gas supply pipes. Plastic reinforced composite pipe system of the steel wire reinforced PE composite PE adopts electro-fusion pipe fittings. The external and internal plastic is fused by heating element in the pipe fittings before they are connected together.

Performance Features

· They are equipped with superior strength, stiffness and anti-impact property to those of the plastic pipe.

· They are equipped with double-side corrosion resistance and equivalent corrosion resistance with that of the plastic pipe.

· Their operating temperature is high and coefficient of heat conductivity is low so that there is no requirement for thermal insulation in winter and no dew formation in summer.

· The pipe internal wall is smooth and clean and is free from scaling so that the head loss is 30% less than that of the steel pipe.

· The pipe adopts electro-fusion connection with mature technology. The electric-fusion joint is equipped with strong resistance capacity for axial tensile force. There are several specifications and categories of pipe fittings.

· The pipe is light weighted and convenient for transportation and construction and are of high reliability. Its service life is 50 years under normal conditions.

· The cost is low. Being hygienic and non-poisonous, it is the optimum substitute for galvanized pipes.

Steel wire reinforced PE composite PE for gas supply

Nominal external diameter(dn)/mm		Nominal pressure/MPa							
		0.6		0.8		1.0		1.25	
Basic dimension	Limit deviations	Nominal wall thickness and limit deviations							
50	+1.2 0	4.5	+1.2 0	5.0	+1.2 0	5.5	+1.5 0	5.0	+1.5 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
75	+1.2 0	5.0	+1.2 0	5.0	+1.2 0	5.5	+1.5 0	6.0	+1.5 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
110	+1.5 0	7.0	+1.5 0	7.0	+1.5 0	7.5	+1.5 0	8.5	+1.5 0
140	+1.7 0	8.0	+1.5 0	8.5	+1.5 0	9.5	+1.5 0	9.5	+1.5 0
160	+2.0 0	9.0	+1.5 0	9.5	+1.5 0	10.0	+2.0 0	10.5	+2.0 0
200	+2.3 0	9.5	+1.5 0	10.5	+1.5 0	11.0	+2.0 0	12.5	+2.2 0
225	+2.5 0	10.0	+2.0 0	10.5	+2.0 0	11.0	+2.0 0	–	–
250	+2.5 0	12.0	+2.2 0	12.0	+2.2 0	12.5	+2.2 0	–	–
315	+2.7 0	11.5	+2.5 0	13.0	+2.5 0	–	–	–	–
355	+2.8 0	12.0	+2.5 0	–	–	–	–	–	–
400	+3.0 0	12.5	+2.8 0	–	–	–	–	–	–
450	+3.2 0	13.5	+2.8 0	–	–	–	–	–	–
500	+3.2 0	15.5	+3.0 0	–	–	–	–	–	–

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DONGHONG PIPE INDUSTRY

Products for Gas Supply

Electro-fusion pipe fittings for gas supply

Electro-fusion coupling

Electro-fusion reducer

Electrofusion tee

Electro-fusion 45° elbow

Electro-fusion 90° elbow

Product name	Specifiction	Product name	Specifiction	Product name	Specifiction	Product name	Specifiction		Specifiction
Electro-fusion coupling	S50	Electro-fusion reducer	S110×75	Electro-fusion reducer	S225×90	Electro-fusion reducer	S355×225	Electrofusion Tee	T50×20
	S63		S110×90		S225×110		S355×250		T50×25
	S75		S125×63		S225×125		S355×315		T50×32
	S90		S125×75		S225×140		S400×110		T50×40
	S110		S125×90		S225×160		S400×160		T63×20
	S125		S125×110		S225×200		S400×200		T63×25
	S140		S140×63		S250×63		S400×225		T63×32
	S160		S140×75		S250×75		S400×250		T63×40
	S200		S140×90		S250×90		S400×315		T63×50
	S225		S140×110		S250×110		S400×355		T75×20
	S250		S140×125		S250×125	Electrofusion Tee	T50		T75×25
	S315		S160×50		S250×140		T63		T75×32
	S355		S160×63		S250×160		T75		T75×40
	S400		S160×75		S250×200		T90		T75×50
	S450		S160×90		S250×225		T110		T75×63
	S500		S160×110		S315×110		T125		T90×20
	S560		S160×125		S315×125		T140		T90×25
	S630		S160×140		S315×140		T160		T90×32
Electro-fusion reducer	S63×50		S200×50		S315×160		T200		T90×40
	S75×50		S200×63		S315×200		T225		T90×50
	S75×63		S200×75		S315×225		T250		T90×63
	S90×50		S200×90		S315×250		T315		T90×75
	S90×63		S200×110		S355×125		T355		T110×20
	S90×75		S200×125		S355×140		T400		T110×25
	S110×50		S200×140		S355×160		T450		T110×32
	S110×63		S200×160		S355×200		T500		T110×40

Product name	Specifiction	Product name	Specifiction	Product name	Specifiction	Product name	Specifiction	Product name	Specifiction
Electrofusion Tee	T110×50	Electrofusion Tee	T160×125	Electrofusion Tee	T250×75	Electrofusion Tee	T400×25	Electro-fusion 45° elbow	L50
	T110×63		T160×140		T250×90		T400×32		L63
	T110×75		T200×20		T250×110		T400×40		L75
	T110×90		T200×25		T250×125		T400×63		L90
	T125×20		T200×32		T250×140		T400×75		L110
	T125×25		T200×40		T250×160		T400×90		L125
	T125×32		T200×63		T250×200		T400×110		L140
	T125×40		T200×75		T250×225		T400×125		L160
	T125×50		T200×90		T315×20		T400×140		L200
	T125×63		T200×110		T315×25		T400×160		L225
	T125×75		T200×125		T315×32		T400×200		L250
	T125×90		T200×140		T315×40		T400×225		L315
	T125×110		T200×160		T315×50		T400×250		L355
	T140×20		T225×20		T315×63		T400×315		L400
	T140×25		T225×25		T315×75	Electro-fusion flange adapter	ϕ50		L450
	T140×32		T225×32		T315×90		ϕ63		L500
	T140×40		T225×40		T315×110		ϕ75	Electro-fusion 90° elbow	L63
	T140×50		T225×50		T315×125		ϕ90		L75
	T140×63		T225×63		T315×140		ϕ110		L90
	T140×75		T225×75		T315×160		ϕ140		L110
	T140×90		T225×90		T315×200		ϕ160		L125
	T140×110		T225×110		T315×225		ϕ200		L140
	T140×125		T225×125		T315×250		ϕ225		L160
	T160×20		T225×140		T355×63		ϕ250		L200
	T160×25		T225×160		T355×75		ϕ315		L225
	T160×32		T225×200		T355×90		ϕ355		L250
	T160×40		T250×20		T355×110		ϕ400		L315
	T160×50		T250×25		T355×200		ϕ450		L355
	T160×63		T250×32		T355×225		ϕ500		L400
	T160×75		T250×40		T355×250		ϕ560		L450
	T160×90		T250×50		T355×315		ϕ630		L500
	T160×110		T250×63		T400×20		L50		

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DONGHONG PIPE INDUSTRY

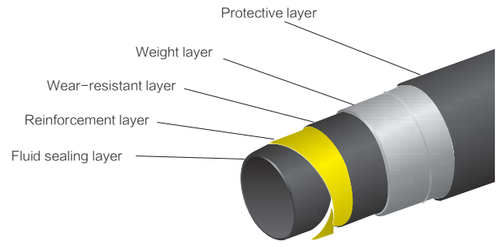
Products for Oil Field

Reinforced Thermo Plastic Composite Pipe (RTP)

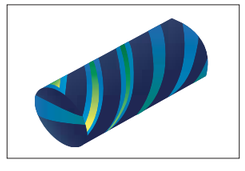
41/42

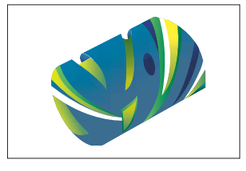
Product Introduction

Reinforced Thermo Plastic Composite Pipe (RTP) is a new heavy pressure composite pipe which is developed by Donghong Pipe Industry with heavy investment so as to adapt to the progress of technology, development of material science and the market demand. This product adopts modified plastics resin as its raw material and high strength multi-layer reinforced fibers as its reinforcement and is manufactured by high temperature extrude forming with hot-fusion glue. It is equipped with both characteristics of general plastics pipe and such features as antistatic property, fire retardant, high strength, high temperature bearing. It is a revolutionary achievement in the development of pipe industry today. The normal pressure-bearing of the pipe is 20Mpa and the maximum pressure-bearing may reach 100Mpa and operating temperature range is -40°C-95°C. It is widely used in mine water supply, drainage, guniting, dust prevention, spray water; gathering pipe and secondary and tertiary oil extraction pipe and convey process pipe of oily sewage in oil and gas field and mixture in gas field; water supply and drainage of urban buildings in municipal engineering, drinking water supply pipe, natural gas and gas supply pipe, desalting plant, seaside power plant, seawater convey in harbor city, submarine line and (optical) cable conducting pipe, return water convey pipe of process water in hot point project, waste slag convey, process pipe and drain pipe for conveying corrosive gas , liquid and solid powder in such industries as petrochemical industry, chemical fertilizer , pesticide, pharmacy, chemistry , mine, rubber plastic.



This composite pipe is equipped with special and continuous multi-layer flexibility and is manufactured by compositing one or more materials. Its intermediate layer is braided by multi-layer high strength reinforced fibers on the external of the pipe so as to have the resistance capacity for radial and axial direction pressure. The external plastic pipe protect the pipe from external environment damage. The heat-insulating layer may be added to the external of the pipe for insulation effect. The pressure withstand strength may be designed and the maximum of which is 100MPa.





It adopts the state-of-the-art finite element design analysis method to calculate and simulate the stress distribution of the metal reinforcement material and stress strain distribution of thermoplastic material when the pipe is under pressure. By combining the fatigue-resistant service life of metallic material and stress strain curve of thermoplastic material in different temperatures, it designs the maximum bearing-pressure, service life, damage pitch of strand, minimum bending diameter of the pipe. Products with different pressure requirement may be manufactured based on the optimal design.

Pipe Connection

The joint adopts metal burke joint connection whose material is generally stainless steel and carbon steel. If the carbon steel is adopted, corrosion resistance treatment shall be carried out. Special equipment is adopted for internal expansion and external burke of the joint, by which the joint and pipe can be fully sealed.

Performance Features

It adopts thermal insulation materials of closed cell polyethylene foamed with thickness no less than 25mm which is clad in the pipe surface. It is non-absorbent and non-deformation and equipped with thermal insulation after being buried. It has the same service life with that of the pipe.

Application Scope

It is applicable for gathering and convey pipe of oil, gas and water in mine and on oil field, for high pressure water injection pipe as well as for hot washing pipe. It is also applicable for the convey of oil, gases and water on offshore oil field, especially for the medium convey of high-sulfur oil, gasses and water.

Performance Index

Serial No.	Item	Unit	Index	Execution Standard
1	Application pressure	MPa	⩽ 100MPa	Company standard
2	Relative equivalent roughness of pipe interior	△ /mm	0.0015 ~ 0.015	
3	Application temperature	℃	−40 ~ 95	
4	Service life	Year	⩾ 50	
5	Temperature range of electrical heating	℃	40 ~ 65	
6	Initial coefficient of heat conductivity of thermal insulation layer	w/m•k	0.028	
7	Continuous length	Meter	200−1200	

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DONGHONG PIPE INDUSTRY

Products for Infrastructure

PE pipe for water supply

Product Introduction

PE water supply pipe uses special polyethylene as raw material and is extruded once by plastic extruder. It is applicable for urban water supply network, irrigation and division project and agricultural sprinkler project, especially for acid and alkali resistant and corrosion resistance environment. Since the PE pipe adopts hot-fusion and electro-fusion connection, the integration of joints and pipe is realized. It can also resist circumferential stress generated by internal pressure and impact stress on axial direction. In addition, the PE pipe is free from stabilizing agent of heavy metallic salt and the material is non-toxic and free from scaling and bacteria breeding so as to avoid secondary pollution of drinking water.

Pipe Standard

The production and inspection of the PE water supply pipe of the Company complies with the requirements of National Standard GB/T 13663-2000 Polyethylene (PE) Pipes for Water Supply.

Application Fields

They are applicable for the urban tap water pipe network system, replaceable cement pipe, cast iron pipe and steel pipe and convey pipe of industrial raw materials, landscaping water supply network as well as agricultural irrigation pipe.

Performance Features

- Non-toxic and hygienic

The pipe material, which is non-toxic and green building material, is free from corrosion and scaling.

- Corrosion resistance

Polyethylene (PE) is inert material. Except for a few strong oxidants, it may resistant corrosion of various chemical mediators. It has no electrochemical corrosion and has no need for the protective coating.

- Free from leakage

The polyethylene pipe mainly adopts hot-fusion and electro-fusion connection which realizes the pipe system integration. It is equipped with satisfactory capacity of water fastness. The effective ability of resistance against underground movement and end load of fusion joint and polyethylene pipe which integrate with the pipe greatly enhances the safe reliability of water supply and water utilization rate.

- Small flow resistance

The absolute roughness coefficient of internal wall of polyethylene water supply pipe is less than 0.01 which reduces water supply consumption effectively.

- High toughness

The polyethylene water supply pipe is equipped with high toughness and the elongation at break is generally above 500%. It has a strong adaptive capacity for non-uniform settlement and excellent anti-jolt property.

- Excellent flexible

The flexibility of polyethylene pipe enables the polyethylene water supply pipe to be curled and provided with greater length so as to avoid large amount of joints and pipe fittings and increase pipe economic value.

- Long service life

The safe service life of polyethylene pressure pipe is above 50 years.

Cautions

1. The pipes and pipe fittings shall be stored in the well ventilated warehouses or shelters and shall not be stored in open-air. Avoid direct sunlight and pay attention to fire safety. The distance from the pipes and pipe fittings to the heat source shall not be less than 1m.

2. The pipes shall be stacked horizontally on the even ground and shall not be bent. The stacking shall not exceed 1.5m and all the pipes shall be stacked layer by layer and shall not be stacked too high.

3. The pipe and pipe fittings for distribution shall be packaged well, handled with care, kept from oil stain, and must be prevented from fierce impact, contacting with sharp objects, throwing, plunging, rolling, or hauling.

4. The pipe and pipe fittings shall not be struck with hard objects especially when the temperature is low. And the pipes must be cut in the vertical direction to the pipe axial direction and the cuts shall be kept clean and smooth.

5. Thermo-fusion connection shall be conducted in strict accordance with specified fusion depth.

6. Hot-fusion connection shall be conducted in strict accordance with specified fusion time.

7. In hot-fusion connection, the maximum deviation angle of pipes and pipe fittings shall not exceed 5 degree.

8. The bending radius of the pipe shall not be less than 8 times of the pipe diameter when bending. It is strictly forbidden to bend the pipe with open flame and heating.

9. The metal thread shall be designed as V-shaped. The hemp or PTFE tape may be used for sealing during connection and shall not be screwed too tight.

10. Bent pipes must be used when two pipes are crossing or overlapping.

11. Polyethylene water supply pipe shall be avoided from being used for pulling and hanging.

12. The position and trend of concealed pipe shall be marked after the sealing of directly-buried concealed pipe.

13. It is strictly forbidden to impact or nail sharp objects like metal nails on the pipe.

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DONGHONG PIPE INDUSTRY

Products for Infrastructure

PE pipe for water supply

45/46

Technical requirements of PE water supply pipe

Item	Technical requirements	
Appearance	The internal and external pipe surfaces shall be smooth and neat and free from such defects as air bubbles, obvious scratches, deboss, impurities, color non-uniform. End faces shall be cut smoothly and neatly and be vertical to tube axis.	
Heat stability	>20	
Longitudinal reversion	⩾ 350	
Melt flow rate(MFR).(190℃ .5kg)g/10min	⩽ 3	
MFR change rate before and after processing	<20%	
Hydrostatic strength	PE80	(1) 20℃ . Ring stress 9.0MPa，Time to break ⩾ 100h (2) 80℃，Ring stress 4.5MPa，Time to break ⩾ 165h (3) 80℃，Ring stress 4.0MPa，Time to break ⩾ 1000h
	PE100	(1) 20℃ . Ring stress 12.4MPa，Time to break ⩾ 100h (2) 80℃，Ring stress 5.4MPa，Time to break ⩾ 165h (3) 80℃，Ring stress 5.0MPa，Time to break ⩾ 1000h

Nominal Pressure and Dimensions of Class PE 100 Polyethylene Pipe

Nominal external diameter dn/mm	Nominal wall thickness e_n/mm				
	Standard dimension ratio (SDR)				
	SDR33	SDR21	SDR17	SDR13.6	SDR11
	Nominal pressure/MPa				
	0.4	0.6	0.8	1.0	1.25
20	/	/	/	/	2.0
25	/	/	/	/	2.3
32	/	/	/	/	3.0
40	/	/	/	/	3.7
50	/	/	/	/	4.6
63	/	/	/	4.7	5.8
75	/	/	4.5	5.6	6.8
90	/	4.3	5.4	6.7	8.2
110	/	5.3	6.6	8.1	10.0
125	/	6.0	7.4	9.2	11.4
140	4.3	6.7	8.3	10.3	12.7
160	4.9	7.7	9.5	11.8	14.6
180	5.5	8.6	10.7	13.3	16.4
200	6.2	9.6	11.9	14.7	18.2
225	6.9	10.8	13.4	16.6	20.5
250	7.7	11.9	14.8	18.4	22.7
280	8.6	13.4	16.6	20.6	25.4
315	9.7	15.0	18.7	23.2	28.6
355	10.9	16.9	21.1	26.1	32.2
400	12.3	19.1	23.7	29.4	36.3
450	13.8	21.5	26.7	33.1	40.9
500	15.3	23.9	29.7	36.8	45.4
560	17.2	26.7	33.2	41.2	50.8
630	19.3	30.0	37.4	46.3	57.2
710	21.8	33.9	42.1	52.2	64.6
800	24.5	38.1	47.4	58.8	72.7
900	27.6	42.9	53.3	66.2	81.8
1000	30.6	47.7	59.3	73.5	90.9
1200	36.4	57.2	70.6	88.2	109.1

Nominal Pressure and Dimensions of Class PE 80 Polyethylene Pipe

Nominal external diameter dn/mm	Nominal wall thickness e_n/mm				
	Standard dimension ratio (SDR)				
	SDR26	SDR21	SDR17	SDR13.6	SDR11
	Nominal pressure/MPa				
	0.6	0.8	1.0	1.25	1.6
20	/	/	/	/	2.0
25	/	/	/	/	2.3
32	/	/	/	/	3.0
40	/	/	/	/	3.7
50	/	/	/	/	4.6
63	/	/	/	4.7	5.8
75	/	/	4.5	5.6	6.8
90	/	4.3	5.4	6.7	8.2
110	4.2	5.3	6.6	8.1	10.0
125	4.8	6.0	7.4	9.2	11.4
140	5.4	6.7	8.3	10.3	12.7
160	6.2	7.7	9.5	11.8	14.6
180	6.9	8.6	10.7	13.3	16.4
200	7.7	9.6	11.9	14.7	18.2
225	8.6	10.8	13.4	16.6	20.5
250	9.6	11.9	14.8	18.4	22.7
280	10.7	13.4	16.6	20.6	25.4
315	12.1	15.0	18.7	23.2	28.6
355	13.6	16.9	21.1	26.1	32.2
400	15.3	19.1	23.7	29.4	36.3
450	17.2	21.5	26.7	33.1	40.9
500	19.1	23.9	29.7	36.8	45.4
560	21.4	26.7	33.2	41.2	50.8
630	24.1	30.0	37.4	46.3	57.2
710	27.2	33.9	42.1	52.2	64.6
800	30.6	38.1	47.4	58.8	72.7
900	34.4	42.9	53.3	66.2	81.8
1000	38.2	47.7	59.3	73.5	90.9
1200	46.2	57.2	70.6	88.2	109.1

(PE) pipe fittings for water supply complete diverse in specification and color


Injection mould of 45° elbow


Injection mould of 90° elbow


Injection mould of reducing coupling


Injection mould cap


Electro-fusion coupling


Electro-fusion Tee


Injection mould of reducing Tee


Electro-fusion flange


Injection mould of flange adapter


Electro-fusion saddle


90° electro-fusion elbow

Performance Features

● Light weight and high strength

The density of High density polyethylene is 940-960kg/m3 which is only 1/8 of that of the steel and iron and 2/3 of that of the polyvinyl chloride. It may bear 1.6 MPa pressure under normal use condition.

● Long service life and large flow amount

The service life of traditional steel and iron pipe fittings is about 15 years while that of the polyethylene pipe fittings is above 50 years. Its roughness is only 1/6 of that of the steel and iron pipe fittings which enables the pipe fittings has a larger flow amount when the inside diameters are the same. The longer the pipe fittings are used the more obvious it is.

● Easy transportation and installation, fast and reliable, low comprehensive costs

Compared with iron and steel pipe fittings, the polyethylene pipe fittings are light weighted and with satisfactory flexibility which are beneficial to transportation and installation. The pipe fittings adopt butt fusion and electro-fusion connection which greatly reduce labor intensity and construction cost.

● Non-toxic, hygienic and green building material

Compared with iron and steel pipe fittings, the polyethylene pipe fittings are free from scaling and secondary pollution caused by scaling, corrosion in iron and steel pipe.

PE pipe fittings for water supply

Product name	Specifiction	Product name	Specifiction	Product name	Specifiction	Product name	Specifiction	Product name	Specifiction
socket straight tee	T20×20	socket reducing Tee	T25×20	socket reducing Tee	T50×40	socket reducing Tee	T75×63	socket equal coupling	
	T25×25		T32×20		T63×20		T90×40		S32×32
	T32×32		T32×25		T63×25		T90×50		S40×40
	T40×40		T40×20		T63×32		T90×63		S50×50
	T50×50		T40×25		T63×40		T90×75		S63×63
	T63×63		T40×32		T63×50		T110×63		S75×75
	T75×75		T50×20		T75×32		T110×75		S90×90
	T90×90		T50×25		T75×40		T110×90		S110×110
	T110×110		T50×32		T75×50				S25×20

Product name	Specifiction	Product name	Specifiction	Product name	Specifiction	Product name	Specifiction	Product name	Specifiction
socket reducing coupling	S32×20	socket reducing elbow	S110×90	socket pipe cap	Φ32×32	socket male Coupling	20×1/2M	socket male Tee	T25×3/4M
	S32×25		L25×20		Φ40×40		25×1/2M		T32×3/4M
	S40×20		L32×20		Φ50×50		25×3/4M		T32×1M
	S40×25		L32×25		Φ63×63		32×1M	socket male elbow with base	L20×1/2F
	S40×32	socket 90° elbow	L20×20	socket flange adapter	Φ40×40		40×11/4M		
	S50×20		L25×25		Φ50×50		50×11/2M	stop valve	Φ20×20
	S50×25		L32×32		Φ63×63		63×2M		Φ25×25
	S50×32		L40×40		Φ75×75		20×1/2F		Φ32×32
	S50×40		L50×50		Φ90×90	socket female elbow	25×1/2F		Φ40×40
	S63×20		L63×63		Φ110×110		25×3/4F		Φ50×50
	S63×25		L75×75		Φ125×125		32×3/4F		Φ63×63
	S63×32		L90×90		Φ140×140		32×1F	socket female union	Φ20×20
	S63×40		L110×110		Φ160×160	socket male elbow	20×1/2M		Φ25×25
	S63×50	socket 45° elbow	L20×20		Φ200×200		25×1/2M		Φ32×32
	S75×32		L25×25		Φ225×225		25×3/4M		Φ40×40
	S75×40		L32×32		Φ250×250		32×3/4M		Φ50×50
	S75×50		L40×40		Φ315×315		32×1M		Φ63×63
	S75×63		L50×50	socket female coupling	20×1/2F	socket female Tee	20×1/2F	socket male union	Φ20×20
	S90×40		L63×63		25×1/2F		25×1/2F		Φ25×25
	S90×50		L75×75		25×3/4F		25×3/4F		Φ32×32
	S90×63		L90×90		32×1F		32×3/4F		Φ40×40
	S90×75		L110×110		40×11/4F		32×1F		Φ50×50
	S110×63	socket cap	Φ20×20		50×11/2F	socket male Tee	20×1/2M		Φ63×63
	S110×75		Φ25×25		63×2F		25×1/2M		

东宏管业
DONGHONG PIPE INDUSTRY

Products for Infrastructure

Steel wire reinforced PE composite pipe

Product Structure

The serial product adopts high strength plastic coated steel wire as reinforcements and is new composite pipes with composite thermoplastic on both internal and external layers with medium, high and low pressure. Since the reinforcements are clad in the continuous thermoplastic, this type of composite pipe not only overcomes the disadvantages of steel pipe and plastic pipe respectively but also is equipped with the common advantages of the former two. They are not only the revolutionary technology achievements of construction and municipal water supply pipes after the galvanized pipe are forbidden but also pipes with large diameter and stiffness which are urgently required by such fields as petroleum, chemical industry, pharmacy, food, mine and fuel gas. Steel wire mesh and plastic reinforced composite pipe system adopts electro-fusion pipe fittings. The external plastic and internal plastic is fused by the heating element in the pipe fittings before they are connected together.

Product Features

- They are equipped with superior strength, stiffness and anti-impact property to those of the plastic pipe
- They are equipped with double-side corrosion resistance and equivalent corrosion resistance with that of the plastic pipe
- Their operating temperature is high and coefficient of heat conductivity is low so that there is no requirement for thermal insulation in winter and no dew formation in summer.
- The pipe internal wall is smooth and clean and is free from scaling so that the head loss is 30% less than that of the steel pipe.
- The pipe adopts electro-fusion connection with mature technology. The electric-fusion joint is equipped with strong resistance capacity for axial tensile force. There are various specifications and categories of pipe fittings.
- The pipe is light weighted and convenient for transportation and construction and are of high reliability. Its service life may be 50 years under normal conditions.
- The cost is low. Hygiene and non-toxic, it is the optimum substitute for galvanized pipes.

Execution Standard

Hygienic index complies with the specifications of Standard for Safety Evaluation of Equipment and Protective Materials in Drinking Water System (GB/T 17219).

Product standard complies with CJ/T 189-2007.

Technical Requirements

Its color is generally black, and it may also be determined through the negotiation between the supplier and the purchaser. The internal and external surface of the pipe shall be smooth and is allowed to have micro deboss and convex because of autogenously shrinking but is not allowed to have air bubbles, cracks, decomposition and discoloration, and obvious scratches. The ends of the pipe shall be cut smoothly and neatly.

Correction Factor of Nominal Pressure

Temperature(℃)	0<t ⩽ 20	20<t ⩽ 30	30<t ⩽ 40	40<t ⩽ 50	50<t ⩽ 60
Correction factor	1	0.95	0.90	0.86	0.81

The minimum allowable bending radius of straight pipe

Nominal external diameterd_n(mm)	110	140	160	200	250	315	400	500
The minimum allowable bending radius	$80d_n$			$100d_n$			$110d_n$	

Note: the permissible bend radius should not be less than 200dn when the pipe is equipped with joint.

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DONGHONG PIPE INDUSTRY

Products for Infrastructure

Steel wire reinforced PE composite pipe.

53/54

Application

● Chemical industry

They are applicable for the process pipes and discharge pipes for the convey of corrosive gas, liquid, and solid powder in such industries as manufacturing industry of acid, alkali and salt, petrochemical industry, fertilizer, pesticide, pharmacy, chemistry, mine and rubber plastic.

● Oil and gas field

They are applicable for the gathering and convey pipes and pipes used for secondary and tertiary oil extraction and convey process which contains oily sewage, gas field mixture, oil well reinjection polymer solution.

● Mine

They are applicable for slurry, tailings and ventilation pipe and project pipe.

They are applicable for spinning, printing and dyeing, papermaking industry: process attached piping and discharge pipe for corrosive medium convey.

● Municipal engineering

They are applicable for urban buildings water supply and drainage, drinking water, natural gas and gas convey pipe.

● Non-ferrous metal

They are applicable for conveying the corrosive medium in non-ferrous metal smelting.

● Agriculture

They are applicable for deep well pipe, filter pipe, culvert convey pipe, drainage pipe, water supply pipe for irrigation.

● Seawater conveyance

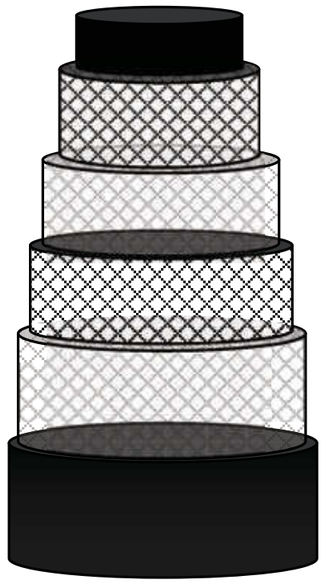
They are applicable for conveying seawater in water desalting factory, seaside power plant and harbor city, as well as submarine pipeline and optical cable (cable) conducting pipe.

● Thermal Engineering

They are applicable for conveying the return water of process water and waste slag.

● Express highway

They are applicable for underground drainage pipe and cable conducting pipe.



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

Nominal external diameter dn/mm		Nominal pressure/MPa											
		0.8	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/mm											
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	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	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	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	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	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		
250	+2.5 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 +2.8 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	22.0 +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									

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DONGHONG PIPE INDUSTRY

Products for Infrastructure

PE/Epoxy coated composite pipe for water supply

55/56

Product Introduction

PE/Epoxy coated composite pipe for water supply is equipped with corrosion resistance property which is manufactured by coating the substrate steel pipe with a special polyethylene plastic power or Epoxy powder after its special process treatment. This product overcomes various defects of the steel pipe such as easy rusty easy rusty and corrosion, high level of pollution, low strength of plastic pipe and easy deformation, and integrates the common advantages of steel pipe and plastic product. It belongs to the important popularized energy saving and environment-friendly products in China. The product may be widely used for such fields as water supply, fire fighting, HVAC,corrosion resistance and heat resistance of the cable interior and exterior, natural gas, thermocycling water pipe, water circulation system, industrial system, circulating water system, purified water system, corrosion resistance system of wear resistant iron, cable sheath, water-spray system of fire fighting, thermal insulation, and chemical corrosion resistance system.

Execution Standard

It complies with Coating Plastic Steel Pipe for Water Supply (CJ/T 120-2008)

Performance Features

● High pressure-bearing, superior mechanical properties

It is equipped with the advantages of steel pipe and high mechanical strength and pressure-bearing capacity for foreign influences such as shock bending.

● High chemical corrosion resistance

They have both advantages of the steel pipe and plastic pipe. The plastic coating has high chemical corrosion resistance. The product may be equipped with various pipe fittings such as flange coating, Tee and elbow after their plastic coated anticorrosive treatment both internal and external so as to ensure the corrosion resistance effect of the entire pipe.

● Strong coating adhesion

It adopts special physical treatment with pretreatment reaching Sa 2.5 Standard. The scientific and appropriate process and advanced equipment ensure the coating quality and the adhesion is superior to national standards.

● Free from scaffolding and scaling, small fluid resistance

They are free from scaffolding and scaling because of their dense internal surface coating. The friction coefficient and roughness degree are less than those of the ordinary steel pipe. They are economic, environmental-friendly products with higher cost performance.

● Various connection modes and convenient for construction

The products may adopt such connection mode as quick joint for simple and convenient installation and reliable performance.

● The internal and external coating may adopt different coating materials and colors according to user requirements.

Main coating methods are internal and external polyethylene coating, internal and external epoxy coating and internal epoxy and external PE as well as other plastic coating processes.

Technical Parameters

Coating material	PE (polyethylene) or EP (epoxy)
General color	black, gray, blue, red, white, green, or other colors according to customer requirements
Coating thickness	PE(polyethylene)coating thickness is 0.6mm – 2.0mm The thickness of EP (epoxy) spray coating is greater than 0.45 mm
Coating modes	Coating modes: dip painting, spray coating, roll painting, flow painting, etc
Product specification	DN15—DN1660 Ambient temperature: -30℃ to 60℃
Connection modes	Screw thread (DN 15 – DN100), trench (DN65 – DN400); flange (applicable for any diameter); welded type; bimetal connection; socket bore, pipe section, tight coupling, etc.

Products for Infrastructure

High pressure steel wire reinforced PE composite pipe

Product Introduction

High pressure steel wire reinforced PE composite pipe takes steel wire mesh which is made of more than three layers of high strength steel wire as its reinforcement, and high density polyethylene(HDPE)as its substrate. The high-performance HDPE modified binding resin connects tightly with the steel wire skeleton and high density polyethylene both internal and external. Since the high strength steel wire reinforcement are clad in the continuous thermo plastic, the new high pressure steel wire braid reinforced polyethylene composite pipe not only overcomes the disadvantages of steel pipe and plastic pipe respectively but also is equipped with advantages of the former two. The high pressure steel wire braid reinforced polyethylene composite pipe adopts high quality material and state-of-the-art production process which makes it to be equipped with higher pressure resistance. Meanwhile, the composite pipe is equipped with superior flexibility and is applicable for long distance underground convey pipe system of water supply and gas and solves the problem of composite pipe with large diameter and no high pressure in the world. The pipe is more applicable for convey of oily sewage, gas field sewage and gas-oil mixture in mine, national large-scale municipal pipe project, and oil and gas field. Its cost performance is superior to that of any other composite pipes.

Application Fields

1. Municipal engineering

They are applicable for water supply, return water pipe of heating network, and convey pipe of coal gas and natural gas.

2. Chemical engineering

They are applicable for process pipe and drainage pipe for convey of corrosive gas, liquid and solid powder in such industries as manufacturing industry of acid, alkali and salt, petrochemical, chemical fertilizer, pharmacy, chemistry, rubber and plastic.

3. Oil field and gas field

They are applicable for pipes used for the second and tertiary oil recovery gathering and convey process which contains oily sewage, gas field sewage and gas-oil mixture.

4. Thermal power project

They are applicable for the convey pipe of process water, return water convey, dust extraction and waste slag.

5. Metallurgical mine

They are applicable for the corrosive medium convey in non-ferrous metal smelting and pipe for ore pulp and tailings process.

6. Express highway

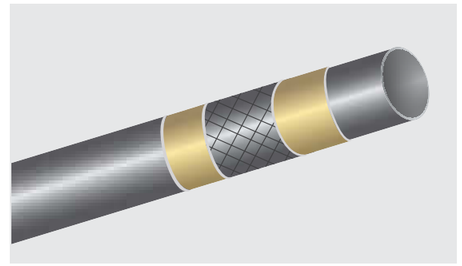
They are applicable for underground drainage pipe and cable conducting pipe.

7. Ocean project

They are applicable for seawater convey, submarine pipe and (optical) cable conducting pipe.

8. Shipbuilding

They are applicable for the ship sewage pipe, drainage pipe, ballast water pipe and ventilation pipe.



Product Introduction

High pressure steel wire reinforced PE composite pipes are equipped with such common features of plastic pipes as corrosion resistance, free from scaling, smooth and low resistance, thermal insulation, free from wax precipitation, wear resistance and light weighted. Moreover, they have the following features because of their unique structure:

● Satisfactory creep resistance, high endurance mechanical strength

Since plastic may creep under the action of normal temperature and stress and brittle fracture may occur under the action of high stress endurance, the permissible stress and pressure-bearing capacity of pure plastics pipe are very low (generally within 1.0MPa). While the mechanical strength of steel is about 10 times of that of the thermo plastic and the steel is stable and will not creep within the range of plastic operating temperature. After the composition of steel wire mesh skeleton and plastic, the steel wire mesh skeleton can restraint plastic creep significantly and enhance the plastic endurance strength greatly. Therefore, the permissible stress of the new high pressure steel wire braid reinforced polyethylene composite pipe doubles that of the plastics pipe.

● Temperature resistance performance.

The strength of plastics pipe reduces as the temperature increases within the range of its operating temperature and it almost reduces more than 10% with each 10℃ increase of the temperature. Since almost two thirds of the strength of new high pressure steel wire braid reinforced polyethylene composite pipe is bore by the steel wire mesh skeleton, the strength reduction degree is lower than that of any pure plastic pipes as the operating temperature increases. Test result indicates that strength reduction degree of the new high pressure steel wire braid reinforced polyethylene composite pipe is lower than 5% with each 10℃ increase of the temperature.

● Combination of satisfactory stiffness, impact resistance and dimensional stability and moderate flexibility

Generally, steel elasticity modulus is about 200 times of that of the high density polyethylene. The stiffness, shock resistance and dimensional stability of the new high pressure steel wire braid reinforced polyethylene composite pipe is superior to any pure plastics pipes because of the strengthen effect of the steel wire mesh skeleton. Meanwhile, the composite pipe is also equipped with certain flexibility in axial direction since the steel mesh skeleton itself is a kind of flexible structure. Therefore, the pipe is a combination of stiffness and flexibility and has the outstanding adaptability and running reliability in loading/unloading, transportation and installation. The support quantity is saved and the cost is lowered with overground installation. And it may bear unexpected impact load effectively because of settlement, glide and vehicle with underground installation. The pipes with small diameters may be bent appropriately. The undulation arrangement or S-shaped arrangement may be adopted with respect to terrain so as to save pipe fittings.

● Small thermal expansion coefficient

Since the linear expansion coefficient of the steel wire used for plastic pipe is 10.6~12.2*10-6(1/ ℃), and linear expansion coefficient of pure plastics pipe is 170 ×10 - 6(1/℃), the thermal expansively of the new high pressure braid reinforced polyethylene composite pipe is improved greatly under the restraint of the steel mesh skeleton which is lower than that of any commonly-used plastics pipes. Its expansion coefficient is 35.4~35.9*10-6 (1/ ℃) which is only 3 to 3.4 times of that of the ordinary carbon steel. Test result indicates that compensation of thermal expansion device may generally not be adopted with underground installation. The pipe may just adopt winding arrangement so as to play an absorption (or releasing) role and reduce the installation cost.

● Free from rapid cracking

Rapid cracking (above hundreds of meters or thousands of kilometers instantly) occurs easily to pure plastic pipes, especially those with large diameters, which is under the action of endurance circumferential stress because of local defects and stress concentration in low temperature. As a result, at present, the requirements for rapid cracking of pipe plastic are very high in the world. Low carbon steel is free from brittle fracture and the existence of steel mesh prevents the plastic deformation and stress from reaching the critical point of rapid cracking. Therefore, the new high pressure steel wire braid reinforced polyethylene composite pipe is free from rapid cracking theoretically.

● Uniform and reliable material composition of steel and plastic

The plastic-steel composite pipe at present market disbonds easily under the action of alternate stress in long-term usage because of the continuous regular joints between steel and plastic which leads to the joint leakage and failure caused by internal bottle-neck contraction and block. Compared with that, in the new high pressure steel wire braid reinforced polyethylene composite pipe, the plastic and steel wire mesh joint tightly and integrated by special hot-fusion glue (modified HDPE). The alternatively constraining force of the two materials is large and uniform and the stress concentration is small.

● Double-side corrosion protection

The steel wire mesh reinforced composites in the plastic by special hot-fusion glue and the internal and external surfaces of the pipe are equipped with identical corrosion resistance and wear resistance. The energy efficient effect of the internal wall is obvious since it is smooth with small conveys resistance and is free from scaling and wax precipitation. The pipe is more economic and convenient for underground convey and in corrosive environment.

● Self-detective

The buried new high pressure steel wire braid reinforced polyethylene composite pipe may be located with general magnetic detection because of the existence of steel wire mesh reinforced so as to avoid damage caused by other excavation which is the most damage to pure plastic pipes and other non-metallic pipes.

● Convenient and flexible adjustment of product structure and performance

The structure and performance of the product may be adjusted by changing mesh space, plastic layer thickness, plastic and type so as to meet different requirements for pressure resistance, temperature resistance and anticorrosion.

● Quick and reliable installation

The new high pressure steel wire braid reinforced polyethylene composite pipe adopts three connection modes which are electric-fusion connection, flanged connection and mechanical-type connection. In Electro-fusion connection, the composite pipe is inserted into the electro-fusion pipe fittings and energizes the heating wire which is embedded in the internal surface of pipe fittings to heat. The internal surface is fused to produce fusing which expanses and fills the clearance of the pipe fittings until the external surface of the pipe produces fusing as well. The two types of fusing fuse together and the pipe and pipe fittings are connected tightly after cooling forming.

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

Nominal external diameter dn/mm		Nominal pressure/MPa											
		0.8	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/mm											
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	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	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	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	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	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		
250	+2.5 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 +2.8 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	22.0 +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									

东宏管业
DONGHONG PIPE INDUSTRY

Products for Infrastructure

Corrugated steel belt reinforced PE pipe for Underground Sewer

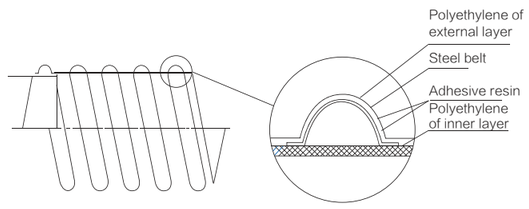
61/62

Structural Diagram

Corrugated steel belt reinforced PE pipe for underground sewer adopts polyethylene as matrix materials of external layer and high-performance adhesion resin coated and bending formed steel corrugation as its main bracing structure, is composited as a integrity by winding and extrusion molding on production lines.

The product combines high stiffness, high strength and such plastic excellent features as corrosion resistance, wear resistance and flexibility. It not only reaches the ring stiffness of SN 8, SN10, SN 12 and SN 16, but also solves the corrosion problem of steel. It compensates for the weakness that the ring stiffness of full plastic underground drainage pipe with relatively large diameter can only reach SN8.

The pipe system adopts such connection modes as hot-fusion welding, thermal contraction pipe (belt) and electro-fusion belt so as to meet the requirements of different project and operating condition and the requirements for convenient connection of reliable seal. The pipe has a wide application in the future and is the initial choice of product to replace conventional large-diameter drainage pipe.



Product Features

- Strong corrosion resistance:The pipe material is corrosion-resistant PE material and will not be corroded by acid and alkali and oil in sewage and waste water.
- Strong external impact resistance:The product is a flexible pipe which has superior performance of recovering to its original shape under external impact and unease to crack in inferior settlement.
- Strong ageing resistance:The pipe has strong aging resistance and may be used effectively for over 50 years because of its base material characteristic.
- Light weighted:The pipe weighted only 1/8 of concrete pipe with the same specification and 2/3 of the conventional pipe with winding plastics structure so that it is convenient for transportation and construction and has no need for large-scale construction equipment.
- Convenient connection:It is equipped with various and easy connection modes which enable simple, convenient and quick construction on site.
- Simple and convenient construction with low cost:The pipe is light weighted with convenient connection and undemanding excavation which can save large amount of project time and cost in urban sewerage project construction.
- Superior wear resistance:The pipe is equipped with smooth interior and low friction coefficient and strong medium convey capacity.
- Environmental-friendly:The polyethylene itself is non-toxic and renewable and will not cause environmental pollution.

Application Scope

- Urban underground drainage and sewerage pipe
- Drainage and sewerage pipe in plant and sewerage treatment plant
- Ventilation system pipe
- Pipe system for cable and optical cable sheath
- Convey pipe of seawater and rainwater
- Collecting system and soak away system
- Agricultural irrigation water pipe
- Production of chemical process vessel

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DONGHONG PIPE INDUSTRY

Products for Infrastructure

Corrugated steel belt reinforced PE pipe for Underground Sewer

63/64

Specification of metal reinforced polyethylene (PE) spiral corrugated pipe for underground sewer

Sequence No.	Nominal bore diameter DN/ID	Minimum average bore diameter $d_{im.min}$	Minimum wall thickness of internal layer e_{1min}	Minimum wall thickness of layer pressure e_{1min}	Maximum thread pitch P_{max}	Minimum steel thickness t_{min}	Minimum thickness of corrosion resistance coating e_{2min}
1	300	294	2.5	4.0	75	0.4	2.2
2	400	392	3.0	4.5	85	0.4	2.2
3	500	490	3.5	5.0	100	0.5	2.5
4	600	588	4.0	6.0	110	0.5	2.5
5	700	685	4.0	6.0	115	0.5	2.5
6	800	785	4.5	7.5	120	0.7	3.0
7	900	885	5.0	7.5	135	0.7	3.0
8	1000	985	5.0	8.0	150	0.7	3.0
9	1100	1085	5.0	8.0	165	0.7	3.0
10	1200	1185	5.0	8.0	180	0.7	3.0
11	1300	1285	5.0	8.0	210	1.0	3.0
12	1400	1385	5.0	8.0	210	1.0	3.0
13	1500	1485	5.0	8.0	220	1.0	3.0
14	1600	1585	5.0	9.0	230	1.0	3.5
15	1800	1785	5.0	9.0	230	1.0	3.5
16	2000	1985	6.0	9.0	235	1.0	3.5

Physical and mechanical properties of the pipe

Item		Indexes	Test Method
Ring stiffness KN/m^2	SN8	⩾ 8	GB/T9647–2003
	SN10	⩾ 10	
	SN12.5	⩾ 12.5	
	SN16	⩾ 16	
Impact property		TIR ⩽ 10%	GB/T14152–2003
Peel strength (20℃ ±5℃)N/cm		⩾ 70	CJ/T225–2011
Ring flexibility		No fracture, no disbond of two walls	GB/T9647–2003
Oven test		No delaminating, no crack	CJ/T225–2011
Tensile strength of seam N		⩾ 1460	GB/T8804.3–2000
Creep ratio		⩽ 2	GB/T18042–2000

● Explanation:

The product complies with Steel belt Reinforced Polyethylene (PE) Spiral Corrugated Pipe for Underground Sewer (CJ/T 225-2011).

Ring stiffness series: SN 8, SN 10, SN 12.5, SN 16.

Pipe dimension: 6 meters, 9 meters or 12 meters, it may be determined through the negotiation between the supplier and the purchaser.

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DONGHONG PIPE INDUSTRY

Products for Infrastructure

Unplasticized polyvinyl chloride (PVC-U) pipe for water supply

65/66

Product Introduction

The unplasticized polyvinyl chloride (PVC-U) pipe for water supply manufactured by our Company adopts non-toxic production formula of imported composite heat stabilizer and the pipe is hygienic and non-toxic. Each performance index complies with the requirements of Unplasticized Polyvinyl Chloride (PVC-U) Pipes for Water Supply (GB/T 10002.1-2006) and Standard for Safety Evaluation of Equipment and Protective Materials in Drinking Water System (GB/T 17219-1998).

Execution Standards

GB/T 10002.1-2006 Unplasticized Polyvinyl Chloride (PVC-U) Pipes for Water Supply

GB/T 17219-1998 Standard for Safety Evaluation of Equipment and Protective Materials in Drinking Water System.

Application Fields

The thermal distortion temperature of the unplasticized polyvinyl chloride (PVC-U) pipe for water supply is low and its Vicat softening point is only around 76°C.Therefore, it cannot be used in higher temperature conditions, and it is applicable for the convey of water for general uses and drinking water with temperature less than 45°C under pressure and may be widely used in pipe system of such industries as municipal administration, construction and agriculture.

Product Features

● Satisfactory mechanical property

The pipe is equipped with high water-pressure resistance, external-pressure resistance and impact resistance. It has satisfactory compression resistance and will not fracture when compressed to 1/2 of its external diameter.

● Small flow resistance

The internal wall of the pipe is smooth with small flow resistance and roughness being 0.008 ~0.009. Its convey capacity increases 25% compared with that of the cast iron pipe and 50% compared with that of the concrete pipe.

● Corrosion resistance and long service life

The pipe has the satisfactory corrosion resistance property and is free from the influence of water content and soil PH. It is non-conducting and insensitive to the dielectric corrosion. It has no need for any anti-corrosive treatment during pipe laying and its service life is as long as 50 years.

● Hygienic and have no influence on water quality

The content of Polyvinyl chloride monomer, which is used as raw material of the pipe, is less than 5 mg / kg and the accessory ingredient used is hygienic and non-toxic so as to ensure the hygienic performance of the pipe meets the sanitation requirements of drinking water. The pipe is from scaling and breeding any alga or other microbe. It will not cause the water to be smelly, tasty or colorful and will not cause second pollution.

● Light weighted and convenient dispatch

The pipe density is only 1/5 of that of the steel and cast iron pipe and 1/3 of that of the concrete. The pipe weighted about 1/4 of the ductile cast iron pipe and 1/10 of the concrete with the same specification and length. Therefore, the handling and loading/unloading are convenient and 1/2 ~1/3 of the transport charge can be reduced.

● Convenient connection and simple installation

Since the PVC-U pipe is light weight and easy to connect and is equipped with certain toughness, its installation is simple and convenient and the construction cost is low.

● Convenient maintenance and low maintenance cost

The pipe is easy to repair without high cost and has no need for complicated tools. The maintenance cost of PVC-U pipe is only 30% of that of the cast pipes or concrete pipes according to practical engineering experience.

● Weather resistance

The UV resistant agent is added to the pipe which can effectively prevent the pipe from being influenced by the ultraviolet rays.

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DONGHONG PIPE INDUSTRY

Products for Infrastructure

Spirally corrugated composite steel pipe for drainage

Product Introduction

The spiral corrugated pipe adopts the steel skeleton with high strength special corrugated structure as its substrate and is manufactured by rolling different corrugated structures on the steel plate with self-developed forming unit and spiral folding and seaming welding. It has such advantages as light weighted, satisfactory stiffness, small friction coefficient and simple connection. The forming pipe adopts stainless steel or galvanized steel and is coated with PE and epoxy powder coating which are R&D by the Company independently so as to be corrosion resistance. It is the optimum selection for municipal drainage pipe.

Application Scope

- It is applicable for municipal administration rain water and sewage drainage project.
- It is applicable for drainage and sewerage project in plant, sewage treatment plant and community.
- It is applicable for agricultural and water conservancy irrigation and drainage project.
- It is applicable for pipe project of ventilation system.
- It is applicable for pipe project of road, bridge and culvert.
- It is applicable for protective sleeve of low-voltage and communication cable.

Product Features

- Light weight: It is 30% lighter than the pipe with identical specification so as to reduce labor intensity and increase construction efficiency.
- High ring stiffness:ring stiffness is generally used as an anti-impact property index for non-pressure pipe or negative pressure pipe. If the index is too small, the pipe will be damaged because of deformation or buckling instability. To ensure the anti-impact property of the pipe, the ring stiffness of this product which is obtained by tests is above SN 16.
- Corrosion resistance: The corrosion resistance property of the stainless steel spiral corrugated pipe itself is strong. The anti-corrosive service life of galvanized spiral corrugated pipe is longer than that of any other coating materials. Spiral corrugated composite pipe with polyethylene coating has both the advantages of the steel pipe and plastic pipe and the coating is equipped with strong chemical corrosion resistant property.
- Convenient for installation and connection: Self-developed connecting piece is convenient and effective which has no need for additional welding and corrosion resistance so as to reduce construction difficulties under special or complex conditions and save large amount of construction charges.

Product Categories

The spiral corrugated pipes are divided into three categories according to their materials:

· Stainless steel spiral corrugated pipe
· Galvanized spiral corrugated pipe
· Spiral corrugated composite pipe with polyethylene coating

Table of technical parameters

Pipe series	Minimum inner diameter	Waveform(thread pitch * peak)	Theoretical outside diameter
DN200	200 ± 5mm	42*7mm	214mm
DN250	250 ± 5mm	42*7mm	264mm
DN300	300 ± 5mm	42*7mm	320mm
DN350	350 ± 5mm	42*7mm	370mm
DN400	400 ± 5mm	39*10mm	420mm
DN450	450 ± 5mm	39*10mm	470mm
DN500	500 ± 5mm	39*10mm	520mm
DN600	600 ± 5mm	40*16mm	632mm
DN700	700 ± 5mm	40*16mm	732mm
DN800	800 ± 5mm	40*16mm	832mm

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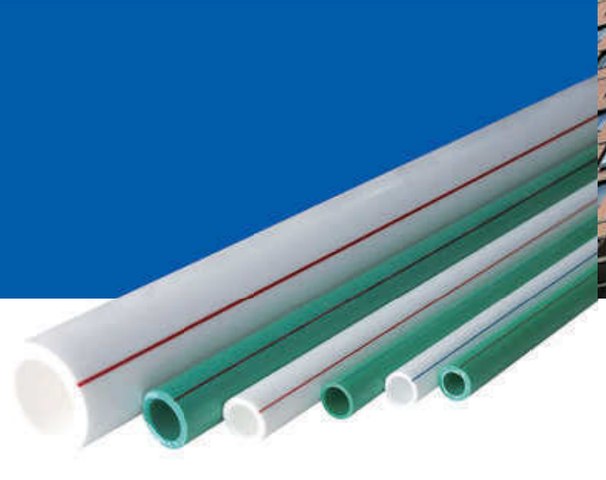
DONGHONG PIPE INDUSTRY

Products for Civil Construction

PP - R pipe

69/70



Application Fields

It is applicable for cold and hot water supply facility in such civil buildings as residential buildings, airports, hotels, schools, offices.

It is applicable for the conveyance of food, chemical products, electronic products.

It is applicable for the pipe for convey various industrial corrosive liquid (acid, alkali, salt)

It is applicable for drinking water pipe network system of purified water and mineral water.

It is applicable for the air conditioning equipment pipes and residential buildings heating pipes.

It is applicable for the air compression pipe network systems in plants and pipe systems of solar energy facilities.

It is applicable for agriculture and garden production convey system.

Performance Features

PP-R pipe for building water supply is an environmental-friendly and energy-saving pipe product with international leading level. It has the following features:

- **Light weight**

Its density is 0.89-0.92g/cm^3 which is only 1/9 of that of the steel pipe and 1/10 of that of the copper pipe. The transportation charges and construction intensity of installation are greatly reduced because of its light weight.

- **Safety and non-toxic**

PP-R pipe is a green environment-friendly product which is non-toxic and pollution free.

- **Long service life**

The service life of PP-R pipe is longer than those of the pipes made of other materials with working pressure 10kg/cm^2.

- **Superior thermal resistance**

The operating water temperature is 70°C for long-term usage and 95°C for short-term usage.

- **Strong corrosion resistance**

It has no chemical action for most of the ions and chemical substances in the building and is free from rusting, corrosion and breeding bacteria.

- **Low coefficient of heat conductivity**

At 20°C, the coefficient of heat conductivity is 0.23-0.24 W/mk which is much less than that of the steel pipe (43-52 W/mk)so the PP-R pipe is equipped with superior thermal insulation property.

- **Small pipe resistance**

Pipe internal wall is smooth and free from scaling, its friction coefficient is only 0.007 which is much less than those of the metallic pipes.

- **Firm pipe connection**

Since polypropylene is equipped with satisfactory hot-fusion connection property. The pipe and pipe fittings made of the same material are connected as integrity so as to eliminate the hidden peril of leakage.

- **Recyclable**

It does not cause any environmental pollution during production, construction and usage with the wastes is recycled. It belongs to green products.

- **Simple installation**

Construction convenience and lower construction cost

Products for Civil Construction

PP - R pipe

Product name	Stop valve
Specification (mm)	20
	25
	32
	40
	50
	63

Product name	90° Female elbow with base
Specification (mm)	20 × 1/2
	40 × 1 1/4
	50 × 1 1/2
	63 × 2

Product name	Female union
Specification (mm)	20
	25
	32
	40
	50
	63

Product name	Female Tee
Specification (mm)	20 × 1/2
	25 × 1/2
	25 × 3/4
	32 × 3/4
	32 × 1

Product name	Male threaded union
Specification (mm)	20
	25
	32
	40
	50
	63

Product name	Female elbow
Specification (mm)	20 × 1/2
	25 × 1/2
	25 × 3/4
	32 × 3/4
	32 × 1

Product name	Male Tee
Specification (mm)	20 × 1/2
	25 × 1/2
	25 × 3/4
	32 × 3/4
	32 × 1

Product name	Male elbow
Specification (mm)	20 × 1/2
	25 × 1/2
	25 × 3/4
	32 × 3/4
	32 × 1

Product name	Male coupling
Specification (mm)	20 × 1/2
	25 × 3/4
	32 × 1
	40 × 1 1/4
	50 × 1 1/2
	63 × 2

Product name	Double union ball valve
Specification (mm)	20
	25
	32
	40
	50
	63

东宏管业
DONGHONG PIPE INDUSTRY

Products for Civil Construction

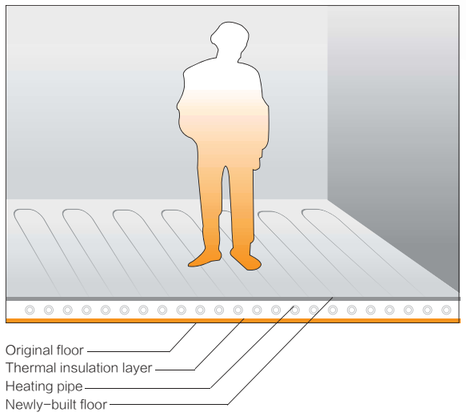
PE - RT floor heating pipe

Product General Introduction

It is a type of heating in which PE-RT heating pipes should be laid in uniform on the building ground before heating the whole floorings in uniform so as to transfer the heat upwards by radiation and achieve the optimum heating effect. Because of the uniform heating on the ground and moderate heat distribution, the indoor average temperature difference is lowered and energy consumption is less as well as the operating cost is low which meet the vertical distribution of physical features.

Application Scope

PE-RT floor heating pipes of floor heating system is applicable for heating in villa, residential buildings, swimming pool, gymnasium and shopping mall, as well as for greenhouse for flowers and vegetables, livestock breeding industry, airport runway, and urban main roads and defrosting pipes.



Performance Features

● Satisfactory thermostability and long-term pressure durability

The pipe is equipped with satisfactory uniformity and stable performance and superior creep resistance. Its service life is ensured to be 50 years in heating and hot water system.

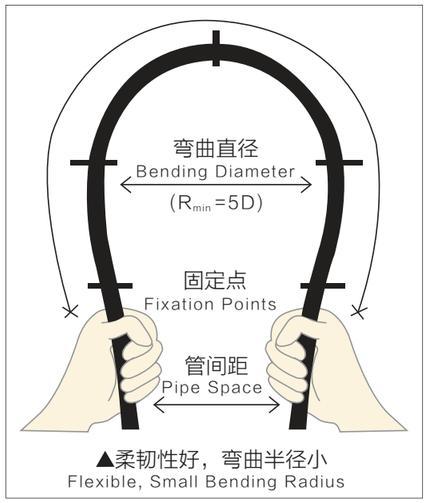
● Superior anti-impact property , safe and reliable.

The temperature of low temperature cracking may reach -70°C. It may be transported and constructed under low-temperature environment and the resistance capacity for external impact is much higher than that of the other pipes which prevents system from damage caused by rough construction.

● Extraordinary flexibility, suppleness, stress cracking resistance, easy construction

The pipe is convenient for bending and construction. It will not relapse after the bending radius is bent slightly (Rmin =5D). The stress of the bending part may relax rapidly so as to avoid damage to the bending part caused by stress concentration. The pipe has no need for preheating under low-temperature environment so the construction is convenient and cost is reduced.

● Hot-fusion connection easy to repair, simple installation, convenient maintenance, high cost performance



▲柔韧性好，弯曲半径小
Flexible, Small Bending Radius

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Products for Civil Construction

PE-RT floor heating pipe

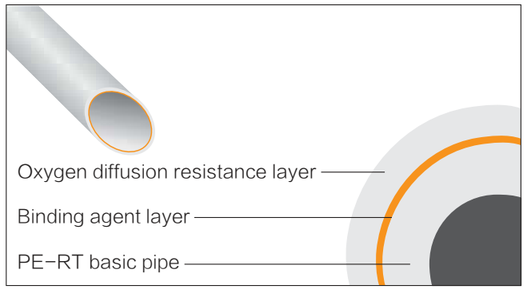
75/76

Quality assurance

The Donghong PE-RT floor heating pipe is equipped with excellent physical properties and long-term hydrostatic strength and has passed the tests of the National Test Center of Polymer and Chemical Building Materials. The pipe system may be used safely for above 50 years.

Execution standard: Polyethylene of Raised Temperature Resistance (PE-RT) Piping Systems for Hot and Cold Water Installations (GB/T 28799-2012)

PE-RT structural drawing of oxygen diffusion resistance



Nominal external diameter d_n	Average external diameter		Nominal wall thickness			
			Pipe series			
	d_{en},min	d_{en},max	S5	S4	S3.2	S2.5
12	12.0	12.3				2.0
16	16.0	16.3	1.8	2.0	2.2	2.7
20	20.0	20.3	2.0	2.3	2.8	3.4
25	25.0	25.3	2.3	2.8	3.5	4.2
32	32.0	32.3	2.9	3.6	4.4	5.4
40	40.0	40.4	3.7	4.5	5.5	6.7
50	50.0	50.5	4.6	5.6	6.9	8.3
63	63.0	63.6	5.8	7.1	8.6	10.5
75	75.0	75.7	6.8	8.4	10.3	12.5
90	90.0	90.9	8.2	10.1	12.3	15.0
110	110.0	111.0	10.0	12.3	15.1	18.3
125	125.0	126.2	11.4	14.0	17.1	20.8
140	140.0	141.3	12.7	15.7	19.2	23.3
160	160.0	161.5	14.6	17.9	21.9	26.6

3 HONORS

Donghong Pipe Industry is the R&D manufacture and equipment base of large-scale plastic pipe for mining, gas, oil field, electric power and heating power, infrastructure, domestic use, and pipe fittings series, raw material serial product. It is also the executive member of China Plastics Piping Association, China City Gas Association and Association of Shandong Coal Mine Equipment Industries.

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Strategic
Cooperation Partner

79/80

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Shenhua Shendong Coal Group Co., Ltd.
PetroChina Kunlun Gas Co., Ltd.
China Petroleum Engineering & Construction Corporation Seventh Construction Corporation
China Huaneng Group
Shenhua Shendong Coal Group Co., Ltd.
China Railway Materials Import&Expot Co., Ltd.
GuoDian&Jian Tou Innermongolia Energy Investment Co., Ltd.
San Coal Industry
SDIC Xinji Energy Co., Ltd.
Shanxi Coal Goods And Materials Co., Ltd.
Yankuang Group Co., Ltd.
Shandong New Mine Support Technology Co., Ltd.
ENN Group Co., Ltd.
China Resources (Holdings) Company Limited
Xinjiang primary coking coal (Group) Co., Ltd.
Xinjiang Haoran Natural Gas Co., Ltd.
Youpai Energy (Xinjiang) Mining Industry Co., Ltd.
Xinjiang Production And Construction Corps Agriculture Construction Fourth Division Seventy-Third Regiment
Ili Agriculture Fourth Division Seventieth Regiment
Manasi County Huijin Gas Co., Ltd.
Ala'er Damo Natural Gas Co., Ltd.
Inner Mongolia Mengtaimanlailiang Coal Industry Co., Ltd.
Erdos Tonghui Heating Gas Group Co., Ltd.
Heilongjiang Longmei Coal Industry Group Co., Ltd.
Huajin Coking Coal Co.,Ltd. Wangjialing Coal Mine
Heilongjiang Longmei Mining Holding Group Co., Ltd.
Wuchang City Water Supply Company
Huozhou Coal Electricity Group Co., Ltd.
Inner Mongolia Taixi Coal Group
Inner Mongolia Pingzhuang Energy Co., Ltd.
Guodian Younglight Jijiajing Coal Industry Co., Ltd.
Shenhua Xinjiang Energy Co., Ltd.
Shenhua Wuhai Energy Co., Ltd.
Shanxi Lu'an Group
Shanxi Lanhua Group
Shanxi Qinxin Group
Shanxi Xishan coal electricity Trade Co., Ltd.
Shenhua Ningxia Coal Industry Group Co., Ltd.
Inner Mongolia Zhongmeimengda New Energy&Chemistry Co., Ltd.

Henan Shenhuo Coal & Electricity Co., Ltd.
Henan Yongcheng Coal & Electricity Holding Group Co., Ltd.
Henan Longyu International Trade Co., Ltd.
Heze City Tapped Water Company
Dalian City Water Supply Co., Ltd.
Gansu Huating Coal & Electricity Co., Ltd.
Gansu Jingyuan Coal Industry Group Co., Ltd.
Shanxi Yinhe Coal Industry Development Co., Ltd.
Guizhou Huanlong Coal Mining Co., Ltd.
Jiaozuo Wanfang Water Affairs Co., Ltd.
Daqing Oil Field Zhongqing Gas Holding Co., Ltd.
Ningxia Hanasi Natural Gas Co., Ltd.
Tiefa Coal Industry Group Co., Ltd.
Qingan County Tapped Water Company
Suzhou Water Supply Service Co., Ltd.
Shandong Water Engineering Corporation
Chongqing Energy Investment GroupWater Resources
Yanzhou Yijin Goods And Materials Co., Ltd.
Qufu Tapped Water Company
Tengzhou Tapped Water Company
China Petroleum International West Africa Co., Ltd. Niger Project
Tianjin Litai Municipal Public Works Co., Ltd.
Jilin Petroleum Group CO., Ltd.
Ningxia Lanxing Natural Gas Development Company
Xinjiang Xintai Investment (Group) Co., Ltd.
Shanxi Kaiyuan Gas Group Gas Engineering Co., Ltd.
Linyi Yijin Goods And Materials Co., Ltd.

Guizhou Panjiang Cleaned Coal Group Co., Ltd.
Tangshan Haiyuan Water Supply Co., Ltd.
Russian Lathouders Pascal Mining Industry Group
Russia Zueque Mining Industry Group
Russian Tocum Mining Industry Group
Design Institute Of Vietnam Coal Group
Turkey Yotanka Company
Australia CQ Company
Unilon Mangkraft Company
Australia MDB Company
Israel ModuleTek Company
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Project Cases

(listed in no particular order)

① Shenhua Shendong Coal Group Co., Ltd.

② Shanxi Coal Transmission&Sale Group Sanyuan Guhan Jinbao Coal Industry Co., Ltd.

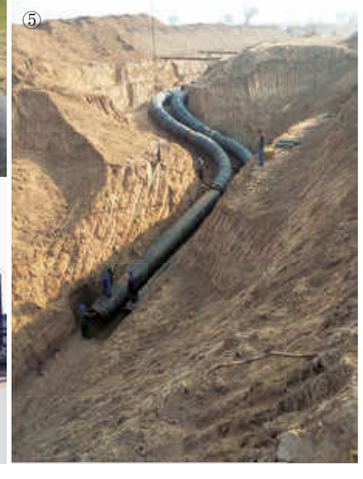
③ Shenhua Ningxia Coal Industry Group Co., Ltd.

④ Mongolia Darhan Urban Water Supply Network System Project

⑤ Drinking Water Safety Project of Inner Mongolia Autonomous Region Alxa League Bayanhot & Sumu Town

⑥ North China Petroleum Administration Gas Pipe Project

⑦ Hegang Juyuan Coal Bed Methane Co., Ltd.



① Ningxia Hanasi New Energy Group Co., Ltd.

② Shanxi Guodian Dingxiang Gas Co., Ltd.

③ Changhai County Sea-Crossing Drinking Water Project of Dalian City Water Supply Co., Ltd.

④ GuoDian&Jian Tou Innermongolia Energy Investment Co., Ltd.

⑥ Drinking Water Project of Fushui Rural Water Supply Co., Ltd., Funing County.

⑤ Tangshan Sanyou Chemical Industries Co., Ltd.

① China Petroleum Engineering & Construction Corporation Seventh Construction Corporation Watersupply And Drainage Pipe Network Project in Zinder, Niger

② Rural Drinking Water Safety Project Of Xinjiang Production and Construction Corps Agriculture Sixty-Second Regiment

③ Jiayuguan Municipal Industrial Area Water Supply Project

④ Rural drinking water safety project of Water Authority of Guang'an District, Guang'an City

⑤ Steel Wire Pipe Project of Russia Sue Eke Mining Industry Group

⑥ Halogen Transmission Pipe Project of 600 Thousand Annual Output Salt Production Project of Salt Co., In Salt Wuyang






① New District Chlor-Alkali Project in Heifei Chemical Products Base of China National Salt

② Strong brine pipeline project of Inner Mongolia Zhongmeimengda New Energy&Chemistry Co., Ltd.

③ Water supply network, central heating pipe network, and drainage pipeline network project of Kedala City

⑤ PE Project of Qufu Holy City Thermal Power Co., Ltd.

④ Industrial Area Water Supply Project of Wumashan, Zanhuang County of Hebei Kuaiyuanchenghe Water Affairs Project Co., Ltd.

⑥ Farmland Recontruction Project of Land Resources Bureau of 24 Qufu City






东宏管业
DONGHONG PIPE INDUSTRY

Brilliant Moments

85/86

△ The establishment of Donghong Science and Technology Park in Qufu City

△ Honored as "disaster relief pioneer" by Wangjialing Coal Mine

△ Manager Zhu participated in "Good Teenagers Good Parents " and received "Loving Mother" silk banner.

△ Mapingchang, the Secretary of Municipal Party Committee of Jining, came to Donghong to guide work.

△ It was honored with the third Mayor Quality Management Prize of Jining City

△ Lichangsheng, the Secretary of Municipal Party Committee of Qufu, came for inspection.

△ Yangfengdong, the Member of Standing Committee and Mayor of Qufu City, came for inspection.

△ The fifty-first standing dommittee conference of thirteen municipal committee of Qufu was held in Donghong which was the first time in history.

△ Signed the strategic cooperation agreement with Denmark Logstor Group.

△ Annual sales had passed RMB 1.5 billion in 2012.

△ Introduced composite pipe production line with four layer 1000 mm steel wire mesh.

△ New spiral welded corrugated pipe was developed and put into operation.

△ The South Plant of Donghong has been built and put into service which represented the development of Donghong enter into a new era.

△ The General Manager was honored with the title of model worker of Shandong Province.

△ The establishment conference of Shandong Donghong Pipe Industry Co., Ltd.

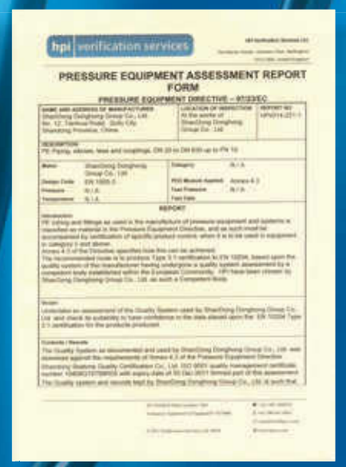
Enterprise

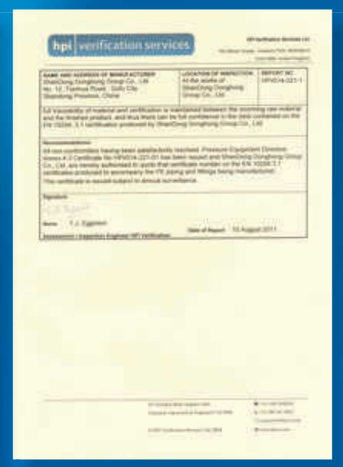
Honors

东宏管业
DONGHONG PIPE INDUSTRY

Enterprise

Certifications





东宏管业
DONGHONG PIPE INDUSTRY

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