

Structured Wall Plastic Pipe and Fittings Spirally Enwound Structure-wall Pipe





Pipes, Building Materials and Home Furnishings, Environmental Protection, Channels and Services



# Contents

Structured Wall Plastic Pipe and Fittings

HDPE Corrugated Pipe and Fittin	gs 01-0	Э4
HDPE Drainage Pipe		05
HDPE Spiral Enhanced Pipe and I	Fittings 06-	10
Metal Reinforced PE Spiral Corruga and Accessories · · · · · · · · · · · · · · · · · · ·		12
PVC-U Double-Wall Corrugated F	Pipe	
and Fittings	13-	16
Spirally Enwound Structure-wall	Pipe 17-2	22
Certifications ·····	23-2	24

### HDPE Double-Wall Corrugated Pipe

- Material: High Density Polyethylene
- Size: 110mm to 800mm Ring Stiffness: SN4 and SN8
- Color: black or other colors upon request

- Standard: BS EN13476-2:2007, BS EN13476-3:2007+A1:2009, GB/T19472-1
- Application: municipal sewage, rainwater discharge, floodwaters drainage, irrigation, ventilation for mine and buildings, industrial waste discharge

### HDPE Double-Wall Corrugated Pipe (Plain End)





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**HDPE** 



Length: 5.8m and	l 8m , othe	r length upor	request
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SN4 (≥4kN/m²)			SN8 (≥8kN/m²)			
SAP Number (5.8m)		Outside Diameter (mm)	SAP Number (5.8m)	Outside Diameter (mm)		
		110	8020030402	110		
	_	160	8020030407	160		

SN4 (≥4kN/m²)		SN8 (≥8	8kN/m²)
SAP Number Inside Diameter (8m) (mm)		SAP Number (8m)	Inside Diameter (mm)
	200		200
-	225	8020032169	225
	300		300
	400	8020032173	400
	500	8020032157	500
	600	8020032160	600
	700	<u> </u>	700
	800		800

Rubber Ring					
SAP Number	Size (mm)				
	110				
_	160				
_	200				
_	225				
	300				
	400				
	500				
	600				
	700				
_	800				

Glass Fiber Reinforced Plastics

Coupling						
SAP Number	Size (mm)					
	110					
	160					
	200					
	225					
	300					
	400					
	500					
	600					
	700					
	800					

### HDPE Double-Wall Corrugated Pipe (Socket End)







Length: 6m or other length upon request

SN4 (≥4kN/m²)		Sn8 (≥8kN/m²)		
SAP Number (6m)	Inside Diameter (mm)	SAP Number (6m)	Inside Diameter (mm)	
	200		200	
	225		225	
	300		300	
	400	_	400	
	500	_	500	
	600	_	600	
	700		700	
	800		800	

Rubber Ring					
SAP Number Size (mm)					
	200				
	225				
	300				
	400				
	500				
	600				
	700				
	800				

Note: SN is Nominal Ring Stiffness, which reflects the ability of a pipe to resist deformation due to an external load. Stiffness classes are identified by an SN number where a higher number indicates greater resistance to deflection.

## HDPE Double-Wall Corrugated Pipe Fittings

## (Fabricated Fittings)



SAP Number	Size (mm)
	225
	300
	400
	500
-	600
-	800
-	

*45°	Flbow	and	other	elbow	upon	the	reques	t
73	LIDOW	unu	Othici	CIDOW	upon	CITC	reques	·



**Reducing Cross** 

Cross

SAP Number	Size (mm)
	225
	300
	400
	500
	600
	800

	15 215011 4114 541161 51	zen apen me request
90° Elbow	SAP Number	Size (mm)
		225
		300
		400
	_	500
	_	600
		800

	300×225
-	400×225
-	400×300
-	500×225
-	500×300
-	500×400
-	600×225
-	600×300
-	600×400
-	600×500
-	800×225
-	800×300
-	800×400
-	800×500
-	800×600

Tee	

Reducing Tee

SAP Number	Size (mm)
	225
	300
	400
	500
	600
	800

SAP Number	Size (mm)
	225
<del>_</del>	300
_	400
<del>_</del>	500
_	600
_	800
_	
_	

Reducer

(Homocentric)	(Eccentric)	
		300×225
-		400×22!
_		400×300
-		500×22!
_		500×300
_		500×400
_		600×22
_		600×300
		600×400
		600×500
		800×22
_		800×300
-		800×400
_		800×500
=		800×600



300×225
400×225
400×300
500×225
500×300
500×400
600×225
600×300
600×400
600×500
800×225
800×300
800×400
800×500
800×600

Tensioner

SAP Number	Size
	2t
	3t

## HDPE Double -Wall Corrugated Pipe Fittings (Injection Molded Fittings)



Tee	SAP Number	Size (mn
		110

90°Elbow	SAP Number	Size (mm)
		110
Plug	SAP Number	Size (mm)

45°Wye	SAP Number	Size (mm)
首へ	1	110





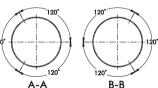


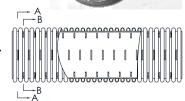
	SAP Number (5.8m)	Size (mm)
e <sub> </sub>		63
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		75
ОО		
DN		

### HDPE Double-Wall Corrugated Pipe--Infiltration Pipe

Length: 6m or other length upon request







SN4 (≥4kN/m²)			SN8 (≥8kN/m²)		
SAP Number (6m)	Size (mm)	Number of Slotting Row	SAP Number (6m)	Size (mm)	Number of Slotting Row
	110	6 rows		110	6 rows

Illustration:  $\Phi$ 110groove width is 1.5mm; the length of the groove is united as 20mm, the tolerance is around  $\pm$ 5mm, specific dimensions can be produced upon request.

### HDPE Double-wall Corrugated Holing Pipe

**Length:** 8m or other length upon request





SN4 (≥4kN/m²)						
Outside Diameter (mm)	Number of Holing Row					
160						
200	8 rows					
225	8 rows					
300	9 rows					
	Outside Diameter (mm) 160 200 225					

SN8 (≥8kN/m²)						
SAP Number (8m)	Number of Holing Row					
	7 rows					
	200	8 rows				
	225	8 rows				
	300	9 rows				

### HDPE Drainage Pipe for HDD

Length: 12m or other length upon request



SN8(≥8KN/m²)						
SAP Number (12M)	SDR	Inside Diameter (mm)	Nominal Wa <b>ll</b> Thickness (mm)			
	21	160	7.7			
-	21	180	8.6			
-	21	200	9.6			
-	21	225	10.8			
-	21	250	11.9			
-	21	280	13.4			
-	21	315	15.0			
-	21	355	16.9			
-	21	400	19.1			
-	21	450	21.5			
-	21	500	23.9			
-	21	560	26.7			
-	21	630	30			
-	21	710	33.9			
-	21	800	38.1			

SN16(≥16KN/m²)						
SAP Number (12M)	SDR	Inside Diameter (mm)	Nominal Wa <b>ll</b> Thickness (mm)			
	17	160	9.5			
	17	180	10.7			
	17	200	11.9			
	17	225	13.4			
	17	250	14.8			
	17	280	16.6			
	17	315	18.7			
	17	355	21.1			
	17	400	23.7			
	17	450	26.7			
	17	500	29.7			
	17	560	33.2			
_	17	630	37.4			
	17	710	42.1			
-	17	800	47.4			

SN32(≥32KN/m²)						
SAP Number (12M)	SDR	Inside Diameter (mm)	Nominal Wall Thickness (mm)			
	21	160	11.8			
	21	180	13.3			
	21	200	14.7			
	21	225	16.6			
	21	250	18.4			
	21	280	20.6			
	21	315	23.2			
	21	355	26.1			
	21	400	29.4			
	21	450	33.1			
	21	500	36.8			
	21	560	41.2			
	21	630	46.3			
	21	710	52.2			
	21	800	58.8			

#### SPIRAL ENHANCED PIPE PE A

- Material: High Density Polyethylene
- Size: 200mm to 2400mm
- Ring Stiffness: SN4, SN8 and SN12.5
- Color: black or other colors upon request.
- Length: 6m,11.8m or other length upon request.
- **Standard:** BS EN13476-2:2007、BS EN13476-3:2007+A1:2009, GB/T19472-1
- Application: municipal sewage, rainwater discharge, floodwaters drainage, irrigation, ventilation for mine and buildings, industrial waste discharge and communication protecting.
- Specification 520 is non-standard product.



SN4 (≥	SN4 (≥4kN/m²)		SN8 (≥8kN/m²)		:12.5kN/m²)
SAP Number (6m)	Inside Diameter (mm)	SAP Number (6m)	Inside Diameter (mm)	SAP Number (8m)	Inside Diameter (mm)
	200		200		200
	250		250		250
	300		300		300
	350		350		350
·	400		400		400
	450		450		450
	500		500		500
	520		<b>*</b> 520		520
	600		600		600
	700		700		700
	800		800		800
	900		900		900
	1000		1000		1000
	1100		1100		1100
_	1200	_	1200		1200
_	1300	_	1300		1300
_	1400	_	1400		
	1500	_	1500		
	1600	_	1600		
	1700		1700		
	1800		1800		
	2000		2000		
	2200		2200		

SAP Number (8m)	Inside Diameter (mm)		NHANCED PIPE PE A (for HDD)
	200	HDD: Horizor	ntal Directional Drilling
	250		
	300		
	350	Φ	
	400		
	450		300000000000000000000000000000000000000
	500	ō	
	600		
	700		
	800		
	900		
	1000		

<sup>\*</sup> The product mold marked as " $\star$ " on this page has not been improved, please note.

### Spiral Enhanced Pipe (Socket End)



	SN4 (≥4kN/m²)		SN8 (≥8kN/m²)		SN12.5 (≥12.5kN/m²)	
S	AP Number (8m)	Inside Diameter (mm)	SAP Number (8m)	Inside Diameter (mm)	SAP Number (8m)	Inside Diameter (mm)
		200		200		200
		250		250		<b>★</b> 250
		300		300		300
		350		350		<b>★</b> 350
		400		400	_	400
_		450		450	_	<b>★</b> 450
		500		500	_	500
_		600		600	_	600
_		700		700	_	700
_		800		800	_	800

### Seal Ring



SAP Number	Inside Diameter (mm)	Scope of Application
	200	SN4、SN8、SN12.5
	250	SN4
		SN8
	300	SN4
	300	SN8、SN12.5
	350	SN4
	330	SN8
	400	SN4
	400	SN8、SN12.5
	450	SN4
	450	SN8
	500	SN4
	500	SN8、SN12.5
	600	SN4、SN12.5
	600	SN8
	700	SN4
	700	SN8、SN12.5
		SN4、SN12.5
	800	SN8

<sup>\*</sup> The product mold marked as " $\star$ " on this page has not been improved, please note.

### SPIRAL ENHANCED PIPE PE A Fittings

#### 45°Elbow



\* 45°Elbow and other elbow upon the request

SN4 (≥4kN/m²)		SN8 (≥8kN/m²)	
SAP Number	Size (mm)	SAP Number	Size (mm)
	200		200
	250		250
	300		300
	350		350
_	400		400
_	450		450
_	500		500
_	600		600
_	700		700
	800		800
	900		900

#### 90°Elbow



SN4 (≥4	4kN/m²)	SN8 (≥8	kN/m²)
SAP Number	Size (mm)	SAP Number	Size (mm)
	200		200
_	250		250
_	300		300
_	350		350
_	400		400
_	450		450
_	500		500
_	600		600
_	700		700
_	800		800
_	900		900
_	1000		1000

Tee



SN4 (≥4	4kN/m²)	SN8 (≥8	kN/m²)
SAP Number	Size (mm)	SAP Number	Size (mm)
	200		200
	250		250
	300		300
	350		350
	400		400
	450		450
	500		500
	600		600

Reducing Tee



SN4 (:	≥4kN/m²)	SN8 (≥8	kN/m²)
SAP Number	Size (mm)	SAP Number	Size (mm)
	250×200		250×200
	300×200		300×200
	300×250		300×250
	350×200		350×200
	350×250		350×250
	350×300		350×300
	400×200		400×200
	400×250		400×250
	400×300		400×300

### SPIRAL ENHANCED PIPE PE A Fittings

Reducing	Tee
Continued	



SN4 (≥	4kN/m²)	SN8 (≥8	kN/m²)
SAP Number	Size (mm)	SAP Number	Size (mm)
	400×350		400×350
	450×200		450×200
	450×250		450×250
	450×300		450×300
	450×350		450×350
	450×400		450×400
	500×200		500×200
_	500×250		500×250
_	500×300		500×300
	500×350		500×350
	500×400		500×400
_	500×450		500×450
_	600×200		600×200
_	600×250		600×250
_	600×300		600×300
_	600×350		600×350
_	600×400		600×400
	600×450		600×450
_	600×500		600×500
			800×200
			800×400

Reducing Cross



SN4 (:	≥4kN/m²)	SN8 (≥8	BkN/m²)
SAP Number	Size (mm)	SAP Number	Size (mm)
_	250×200		250×200
	300×200		300×200
	300×250		300×250
_	350×200		350×200
_	350×250		350×250
_	350×300		350×300
_	400×200		400×200
_	400×250		400×250
_	400×300		400×300
_	400×350		400×350
_	450×200		450×200
_	450×250		450×250
_	450×300		450×300
_	450×350		450×350
_	450×400		450×400
_	500×200		500×200
_	500×250		500×250
_	500×300		500×300
_	500×350		500×350
_	500×400		500×400
_	500×450		500×450
_	600×200		600×200
_	600×250		600×250
_	600×300		600×300
_	600×350		600×350
_	600×400		600×400
_	600×450		600×450
_	600×500		600×500
_	700×250		700×250
	900×300		900×300

### SPIRAL ENHANCED PIPE PE A Fittings

## Electro Fusion Belt (with PE rod)



SAP Number	Size (mm)
	300
_	350
_	400
_	450
_	500
_	600
	700
_	800
	900
_	1000
_	1100
_	1200
_	1300
_	1400
_	1500
_	1600
_	1800
_	2000
_	2200
_	2400

Leakage-Proof Rubber Ring	SAP Number	Size (mm)
	_	200
	_	250
	_	300
	_	350
		400
	_	450
	_	500
	_	600
	_	700
	<del>_</del>	800
	_	900
	<del>_</del>	1000
	_	1100
		1200
	_	1300
	_	1400
	<del>_</del>	1500
	_	1600

Modified Electro Fusion Belt for HDD (with PE rod)



SAP Number	Size (mm)
	300
	350
	400
	450
	500
	600
	700
	800
	900
	1000



Shrinkage Belt

SAP Number	Size (mm)
	200
	250
	300
	350
-	400
_	450
-	500
	600
-	700
	800
-	

1800 2000 2200

Electro Fusion Belt for HDD (with PE rod)



SAP Number	Size (mm)
_	200
_	250
_	300
_	350
	400
	450
	500
	600
	700
	800
_	900
_	1000

### Metal Reinforced PE Spiral Corrugated Pipe

Material: High Density Polyethylene

Size: 500mm to 2400mm

Ring Stiffness: SN8, SN12.5 and SN16

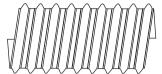
Color: black or other colors upon request

• Length: 6m or other length upon request

 Application: municipal sewage, rainwater discharge, floodwaters drainage, irrigation, industrial waste discharge







SN8 (	≥8kN/m²)	SN12.5 ( <i>≥</i>	12.5kN/m²)	SN16 (	[≥16kN/m²)
SAP Number (6m)	Inside Diameter (mm)	SAP Number (6m)	Inside Diameter (mm)	SAP Number (6m)	Inside Diameter (mm)
_	500		300		300
	600		400		400
	700		500		500
	800		600		600
	900		700		700
	1000		800		800
	1100		900		900
	1200		1000		1000
	1300		1100		1100
	1400		1200		1200
	1500		1300		1300
	1600		1400		1400
	1800		1500		<b>*</b> 1500
_	2000		1600		1600
	2200		1800		
	2400		2000		

<sup>\*</sup> The product mold marked as " $\star$ " on this page has not been improved, please note.

### Metal Reinforced PE Spiral Corrugated Pipe' Accessories

Shrinkage Belt	SAP Number	Size (mm)
	1	500
	_	600
		700
		800
		900
APPLICATION OF THE PERSON OF T	_	1000
		1100
		1200
		1300
		1400
		1500
		1600

PE Welding Rod	SAP Number	Size (mm)
	<u> </u>	4



### Electro Fusion Belt (Narrow)



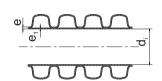
SN	8 (≥8kN/m²)	SN 12.5 (≥	12.5kN/m²)
SAP Number	Size (mm)	SAP Number	Size (mm)
	500		500
	600		600
	700		
	800		
	900		
	1000		1000
	1100		1100
	1200		1200
	1300		1300
	1400		1400
	1500		1500
	1600		1600
	1800		1800
	2000		2000
	2200		
	2400		

**Note:** Please choose the appropriate electro fusion belt (narrow) according to the above application range strictly as the distance between the crests of the pipe is vary from the different ring stiffnesses.

## PVC-U Double-Wall Corrugated Pipe (Socket End)

- Material: Unplasticized Ploy (Vinyl Chloride)
- Size: 63mm to 1000mm
- Ring Stiffness: SN4 and SN8
- Color: cream or other colors upon request
- Standard: ISO 21138-2, ISO 21138-3, GB/T18477-1
- Application: municipal sewage, rainwater discharge, flood waters drainage, irrigation, ventilation for mine and buildings, industrial waste discharge and communication protecting







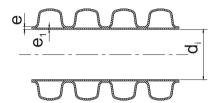
Length: 5.8m,6m or other length upon request

SN4 (≥4	4kN/m²)	SN8 (≥8	BkN/m²)		Ru
SAP Number (5.8m)	Outside Diameter (mm)	SAP Number (5.8m)	Outside Diameter (mm)		SAP Number
	110		63		
_	160		75		
_	200		90		
_	250		110		
_	315		160		
_	400		200		
_	500		250		
_	630		315		
_	800		400		
_	1000		500		
			630		
			800		
			1000		
				_	

Rubber Ring		
SAP Number	Size(mm)	
	63	
	75	
	90	
	110	
	160	
	200	
	250	
	315	
	400	
	500	
	630	
	800	
	1000	

### PVC-U Double-Wall Corrugated Pipe -- Infiltration Pipe





Length: 6m or other length upon request

<b>.</b>	4ki	N/m²	8k	N/m²
Dimensions	SAP Number(6m)	Number of Slotting Row	SAP Number(6m)	Number of Slotting Row
		1		1
		2		2
110		3		3
110		4		4
		5		5
		1		1
		2		2
160		3		3
160		4		4
		5		5
		1		1
		2		2
200		3		3
		4		4
		5		5

#### Slotting regulation for PVC-U double-wall corrugated pipe--half infiltration pipe:

- 1. Slotting for one row;
- 2. Slotting for two rows in 1/3circle(Slotting in a trough between rows);
- 3. Slotting for three rows in 2/5circle(Slotting in triangle);
- 4. Slotting for four rows in 1/2circle(Slotting in triangle);
- 5. Slotting for five rows in 2/3circle(Slotting in triangle);
- 6. Slotting for six rows in 3/4circle(Slotting in triangle).

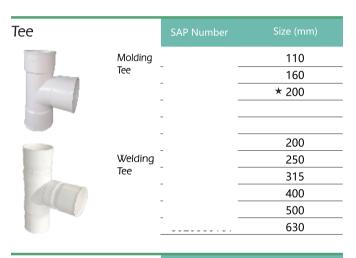
**Illustration:**  $\Phi$ 110groove width is 1.0mm;  $\Phi$ 160groove width is 1.2mm;  $\Phi$ 200groove width is 1.5mm; the length of the groove is united as 40mm, the tolerance is around  $\pm$ 3mm, specific dimensions can be produced upon request.

### PVC-U Double-Wall Corrugated Pipe Fittings

45° Elbow		SAP Number	Size (mm)
	Molding 45°		110
	Elbow		160
			200
	Welding 45°	_	250
	Elbow	_	315
A STATE OF THE PARTY OF THE PAR		_	400
		_	500
			630

90° Elbow		SAP Number	Size (mm)
	Molding		110
	Elbow	_	160
			★ 200
ATTENTION A	Welding	- -	250
	Elbow	_	315
		_	400
			500
			630

Coupling	SAP Number	Size (mm)
		63
		75
		90
		110
		160
		200
		250
		315
		400
		500
		630



**Eccentric Reducer** 

Reducer	SAP Number	Size (mm)
		160×110
		200×110
		200×160
	-	250×110
		250×160
		250×200
	-	315×110
		315×160
		315×200
	-	315×250
		400×110
		400×160
		400×200
	-	400×250
		400×315
		500×110
	-	500×160
		500×200
		500×250
	-	500×315
		500×400

	160×110
_	200×110
_	200×160
_	250×110
_	250×160
_	250×200
_	315×110
_	315×160
_	315×200
_	315×250
_	400×110
_	400×160
_	400×200
_	400×250
_	400×315
_	500×110
_	500×160
_	500×200
_	500×250
_	500×315
_	500×400
_	630×400
•	

<sup>\*</sup> The product mold marked as " $\star$ " on this page has not been improved, please note.

### PVC-U Double-Wall Corrugated Pipe Fittings

Reducing Tee	SAP Number	Size (mm)	Tensioner	SAP Number	Size
Molding		160×110			2T
Reducing Tee		200×110		-	3T
		200×160			
			_		
Welding		250×110			
Reducing Tee		250×160			
		250×200			
		315×110			
		315×160			
		315×200			
		315×250			
		400×110			
		400×160			
		400×200			
		400×250			
		400×315			
		500×110			
		500×160			
		500×200			
		500×250			
		500×315			
		500×400			
		630×400			

#### **Product Introduction:**

Spirally Enwound Structure-wall Pipe PE B(Krah Pipe), The PP is used as the auxiliary support structure, the PE as the inner layer material is made by spirally enwound forming technology, the inner wall is smooth, the outer wall of pipe is circular hollow spiral rib, which belongs to flexible pipe.

Product implementation national standard GB/T 19472.2-2017<Polyethylene structure-wall piping systems for underground usage — Part2: Polyethylene spirally enwound structure-wall pipes>.The construction and acceptance compliance (CECS164: 2004)<Technical Specification for buried PE pipeline of sewer engineering>.







High density polyethylene is used as raw material, light weight, good chemical stability, corrosion resistance, aging resistance, long life, good flexibility and strong impact resistance. The service life can reach 50 years.

The product has been widely used in municipal, electric power, petrochemical, wharf, airport, industrial and mining enterprises and other fields of drainage sewage system, is a reinforced concrete pipe and cast iron pipe and other traditional drainage sewage pipe ideal replacement products.

As a mature product, high density polyethylene (HDPE) structure-wall pipe has been widely used in foreign countries, and has also been rated as a key promotion product by the Ministry of Development in China.

#### **Product characteristics and advantages:**

### 1. The connection quality of pipe interface is high, and the connection mode of zero leakage

pipe can be realized by socket type electro fusion connection, and the interface is the same material socket fusion connection. It is convenient and quick to realize zero leakage in pipeline system.

### 2. High nominal ring stiffness, and strong match for engineering

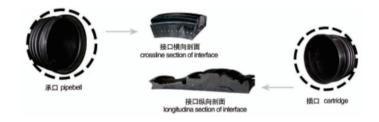
According to different engineering conditions and computer calculation software, the nominal ring stiffness of pipe can reach 20kN/m². The best pipe products and fittings suitable for engineering conditions can be selected.

#### 3. Wide product diameter range.

HDPE pipe can be produced in the current pipe diameter range of DN200-DN3000, pipe standard length of 6000 mm, can produce more than 1000 mm, Any length of pipe below 6000 mm.

#### 4. Good stability of piping system

The circular external rib structure not only increases the nominal ring stiffness of the pipe, but also has root resistance, which solves the problem of longitudinal displacement of the pipe. And the pipe itself is flexible, can achieve side welding while backfilling construction.









### **Applications:**

municipal water supply and drainage, large-scale water conservancy projects, petroleum industry, coal industry, chemical engineering, environmental protection engineering, electric power engineering, etc.

#### **Physical performance indicators:**

ltem		Performance Index
	SN4	≥4
	SN6.3	≥6.3
Nominal Ring Stiffness	SN8	≥8
(kN/m²)	SN10	≥10
	SN12.5	≥12.5
	SN16	≥16
Impact Properties		TIR≤10%
Ring flexibility		The specimen is smooth, no reverse bending, no rupture, and the tear at the beginning of the rib cutting is allowed to be less than 0.075 DN/ID or 75 mm (Take the minimum).
Creep Ratio		≤4
Tension At Weld /N	DN/ID≤300 400≤DN/ID≤500 600≤DN/ID≤700 800≤DN/ID≤1700 1800≤DN/ID≤2400 DN/ID≥2500	≥380 ≥510 ≥760 ≥1020 ≥1428 ≥2040

### **Pipe Specifications:**

- 1. The products according to GB/T 19472.2-2017 Type B Structure-wall pipe standards for production;
- The grade of our company products mainly produces nominal ring stiffness is SN4/6.3/8/10/12.5, SN16 and higher grade are also available upon request;
- 3. The product color is generally black, can also be agreed between the supply and demand parties;
- 4. The pipe length is generally 6 m, can also be agreed between the supply and demand parties;
- 5. This page won the "★" product mold has not been improved, please note.

Size Specifications	Minimum Average Inner Diameter, dim,min(mm)	Minimum Inner Wall Thickness e <sub>4</sub> ,min(mm)	Minimum Inner Wall Thickness e₂, min(mm)	Minimum Spigot Wall Thickness e <sub>1</sub> ,min(mm)
DN200	195	1.5	5.3	5.9
DN300	294	2.0	8.0	8.9
DN400	392	2.5	10.7	11.9
DN500	490	3.0	13.4	14.9
DN600	588	3.5	13.7	15.2
DN700	673	4.0	13.7	15.2
DN800	785	4.5	13.7	15.2
DN900	885	5.0	13.7	15.2
DN1000	985	5.0	13.7	15.2
DN1100	1085	5.0	13.7	15.2
DN1200	1185	5.0	13.7	15.2
DN1300	1285	5.0	13.7	15.2
DN1400	1385	5.0	13.7	15.2
DN1500	1485	5.0	13.7	15.2
DN1600	1585	5.5	13.7	15.2
DN1700	1685	5.5	13.7	15.2
★ DN1800	1785	6.0	13.7	15.2
DN2000	1955	6.0	13.7	15.2



#### **Product Introduction:**

Spirally Enwound Structure-wall Pipe PE B(D)(Slotted Krah pipe) takes PP pipe as auxiliary supporting structure, PE as inner layer material, it is made by hot spirally enwound forming technology, and the inner wall is smooth. The outer wall is a circular hollow spiral rib pipe, which belongs to flexible pipe. The characteristic of the product is that there is no copper wire at the socket, the cutting slot at the socket is used to place the sealing ring, and the connection mode is the socket interface connected by the double elastic seal rubber ring.

Product implementation national standard GB/T 19472.2-2017 Polyethylene structure-wall piping systems for underground usage—Part2: Polyethylene spirally enwound structure-wall pipes>. The design and selection based on German static force calculation standard ATV127, The construction and acceptance compliance (CECS164: 2004) < Technical Specification for buried PE pipeline of sewer engineering>.

High density polyethylene is used as raw material, light weight, good chemical stability, corrosion resistance, aging resistance, long life, good flexibility and strong impact resistance.

The product has been widely used in municipal, electric power, petrochemical, wharf, airport, industrial and mining enterprises and other fields of drainage sewage system, is a reinforced concrete pipe and cast iron pipe and other traditional drainage sewage pipe ideal replacement products.

As a mature product, high density polyethylene (HDPE) structure-wall pipe has been widely used in foreign countries, and has also been rated as a key promotion product by the Ministry of Development in China.

### **Product characteristics and advantages:**

- 1. The pipe is used double elasticity seal rubber ring connection, the sealing performance is superior. The pipe connection adopts double elasticity sealing rubber ring connection socket joint, high sealing.
- 2. Reliable pipe connection, long life, simple and fast.

  The connection mode of pipe is reliable and firm, the service life of sealing ring is long, and the operation is simple and fast.
- 3. The pipe is formed by hot spirally enwound forming, high weld strength and no internal stress.

  Compared with the spirally enwound pipe and the metal reinforced pipe, the krah pipe is air-cooled formed, without internal stress, shaped by the inner wall mould, smooth inner surface and low fluid resistance coefficient.
- **4. High nominal ring stiffness, and strong match for engineering.**According to different engineering conditions and computer calculation software, the nominal ring stiffness of pipe can reach 20kN/m2. The best pipe products and fittings suitable for engineering conditions can be selected.

### **Applications:**

Applications: municipal water supply and drainage, large-scale water conservancy projects, petroleum industry, coal industry, chemical engineering, environmental protection engineering, electric power engineering, etc.

### **Physical performance indicators:**

ltem		Performance Index
	SN4	≥4
	SN6.3	≥6.3
Nominal Ring Stiffness	SN8	≥8
(kN/m²)	SN10	≥10
	SN12.5	≥12.5
	SN16	≥16
Impact Properties		TIR≤10%
Ring flexibility		The specimen is smooth, no reverse bending, no rupture, and the tear at the beginning of the rib cutting is allowed to be less than 0.075 DN/ID or 75 mm (Take the minimum).
Creep Ratio		≤4
Tension At Weld /N	DN/ID≤300 400≤DN/ID≤500 600≤DN/ID≤700 800≤DN/ID≤1700 1800≤DN/ID≤2400 DN/ID≥2500	≥380 ≥510 ≥760 ≥1020 ≥1428 ≥2040

### **Pipe Specifications:**

- 1. The products according to GB/T 19472.2-2017 Type B Structure-wall pipe standards for production;
- 2. The grade of our company products mainly produces nominal ring stiffness is SN4/6.3/8/10/12.5. SN16 and higher grade are also available upon request;
- 3. The product color is generally black, can also be agreed between the supply and demand parties;
- 4. The pipe length is generally 6 m, can also be agreed between the supply and demand parties;

Size Specifications	Minimum Average Inner Diameter, dim,min(mm)	Minimum Inner Wall Thickness e <sub>4</sub> ,min(mm)	Minimum socket thickness e₂ ,min(mm)	Minimum Spigot Wall Thickness e <sub>1</sub> ,min(mm)
DN200	195	1.5	5.3	5.9
DN300	294	2.0	8.0	8.9
DN400	392	2.5	10.7	11.9
DN500	490	3.0	13.4	14.9
DN600	588	3.5	13.7	15.2
★ DN700	673	4.0	13.7	15.2
DN800	785	4.5	13.7	15.2

#### **Product Introduction:**

Spirally Enwound Structure-wall Pipe PE C (T)(flexible krah pipe), the socket is first molded, then the injection pipe is fastened into the steel mould, then the PP pipe is used as the auxiliary support structure. PE as the inner layer material is made by the process of spirally enwound forming pipe body.smooth inner wall and the outer wall is circular hollow spiral rib.which belongs to flexible pipe. The socket adopts double sealing ring connection

Product implementation national standard GB/T 19472.2-2017 Polyethylene structure-wall piping systems for underground usage—Part2: Polyethylene spirally enwound structure-wall pipes>.The construction and acceptance compliance (CECS164: 2004) Technical Specification for buried PE pipeline of sewer engineering>.

High density polyethylene resin (HDPE) is a kind of environmental protection and safety product. It has the advantages of light weight, strong bearing capacity, high joint quality, long life, corrosion resistance, high ring stiffness and convenient construction.It's currently buried sewage, drainage of the preferred pipe.



#### **Product characteristics and advantages:**

#### 1. The connection of pipe joint is convenient and can be connected directly with injection inspection chamber.

Flexible sealing ring connection, easy installation, high construction efficiency, can adapt to the installation of rain water environment; socket injection molding, good interchangeability, direct insertion, no electric heating equipment, save installation costs; Can be directly connected with the injection inspection chamber produced by the company.

#### 2. High nominal ring stiffness, and strong match for engineering

According to different engineering conditions, the nominal ring stiffness of pipe can reach 20kN/m², the best pipe suitable for engineering conditions and complete inspection chamber fittings can be selected.

#### 3. Wide product diameter range, flexible joint

The pipe can be produced in the DN300-DN1400 of the national standard, the normal effective length of the pipe is 6 meters, and the pipe can be produced within 3-6 meters; The two ends of the pipe can be socketed or double spigot.



### **Physical performance indicators:**

ltem	Performance Index		
Nominal Ring Stiffness (kN/m²)	SN4	≥4.0	
	SN6.3	≥6.3	
	SN8	≥8.0	
	SN10	≥10	
	SN12.5	≥12.5	
Impact Properties	≤10%		
Ring flexibility	The specimen is smooth, no reverse bending, no rupture, and the tear at the beginning of the rib cutting is allowed to be less than 0.075 DN/ID or 75 mm (Take the minimum).		
Creep Ratio	≤4		
Tension At Weld /N	DN/ID≤300 400≤DN/ID≤500 600≤DN/ID≤700 800≤DN/ID≤1700	≥380 ≥510 ≥760 ≥1020	

### **Pipe Specifications:**

- 1. The grade of our company products mainly produces nominal ring stiffness is SN4/6.3/8/10/12.5. SN16 and higher grade are also available upon request;
- 2. The product color is generally black, length is generally 6 m,can also be agreed between the supply and demand parties;
- 3. This page won the "★" product mold has not been improved, please note.

Size	Minimum Average Inner Diameter, dim,min(mm)	Minimum Inner Wall Thickness e <sub>4</sub> ,min(mm)
<b>*</b> 200	195	1.5
300	294	2.0
400	392	2.5
500	490	3.0
600	588	3.5
<b>★</b> 700	673	4.0
800	785	4.5
1000	985	5.0
1200	1185	5.0
1400	1385	5.0