IN THE NAME OF GOD

GAHDIR LOULEH PASSARGAD COMPANY

MANUFACTURER OF CORRUGATE AND WATER PE PIPES
CORRUGATE PIPES 110-1000 MM AND SPIRAL PIPES 1200-2500MM
WATER PIPE 16-400 MM
Mobil:00989121970655-009891215392576

www.ghadirlouleh.com

CORRUGATE AND WATER PE PIPE PRODUCTION COMPANY

SUMMERY AND PRODUCT OF GHADIR LOULEH COMPANY

Ghadir Louleh Parsargad Company started its activity on 2011 by having a share of long Experaince of partners.

This company by using 12 lines of the new technology for produce PE corrugated 160-1000 MM and spiral pipes 1000-2500MM and two PE water pipes 16-400MM by 12000 Ton capacity in years has been exploited at GARMSAR Industry Zone near to Tehran capital city.

OTHER PRODUCT WITH OUR PARTNER

We are producing also PE Manhole (1000-1200mm) using for the sewage line and fitting forwaste water line , Memberance PE sheet for water pool ,Gage fish farm equipment and PEwater fitting . So if you

needed in the project we can supply and help you for doing those. We are big production group.

Corrugate PE pipe

Ghadir polyethylene (PE) corrugated pipes are intended for the construction of a pipeline and gravity drainage of all kinds of waste water. The system is dimensionally identical to the PP corrugated pipes or by using a different material or PE-polyethylene. The main difference is the weight of the product, polyethylene pipe is slightly heavier for the same strength of the ring. These pipes provide a reliable function in almost all circumstances, however, in case of need for greater ring stiffness or transport of aggressive

liquids, we advise consultation with our technical support. The pipeline is made of PE pipes GHADIR . It is set and tested in accordance with EN 1610 which will provide long-lasting and reliable function in almost all conditions. Buyer in accordance with its needs chooses a circumferential stiffness (strength ring) pipe that can be SN 4 (4 KN/m²), SN 8 (8 KN/m²), at the request of a customer up to SN 16 (64 KN/m²). With the program we offer a complete pipe manhole manufactured of our pipes or roto casting technique as well as a complete range of fittings so that we can meet all customer requirements regardless of how the project was complex.

The our company product use for sewage line and

- Rain water drainage
- Sewage and mixed water channels
- Various special solutions for industry and business
- Ground drainage
- Domestic drainage

All products of the company are 160-1000 mm in the form of in line belling to facilitate the connection

Of two pipes...Also we are using EPDM rubber for jointing about increase of quality and duration .

We are producing the PE corrugate pipes in 160 mm to 1600 mm diameters with as following information.

The pipes of 1200_ 2500 mm produce by spiral lines .If you need more information please contact co.

ROW	INSIDE MM	OUTSIDE MM	H OF PROFILE	SN4 KG/M	SN8 KG/M
1	110	124	7	1	1
2	160	187	14	1.8	1.8
3	200	233.8	17.4	2	2.5
4	250	292	21	3	3.7
5	315	368.2	27.1	5	6
6	400	467.5	33.75	7.5	9
7	500	584	42	12.5	15
8	600	708	54	17	20
9	700	812	56	23	29
10	800	925	62	33	39
11	900	1030	75	45	55

12	1000	1180	90	46	56
13	1200	1400	100	75	93

Also, our company produces large size pipes (1200-2500 mm) in a special spiral design(spiralcorrugate pipes), which is used to connect them to the shrink or extruder welding method or belling.

Quality control

Thank to special design of its external surface Corrugated pipe exhabit increasd strength to the loads induced on the pipes by heavy traffic and weight of soil above it in addition their endurance to seismic loads due to their flexibility their resistance to chemicals is alsosignificant . thank to their PE molecular structure , corrugated pipe under go high degree of elastic deformation under impact loading and restores its original shap

when the loading is relased .Their permanent deformation limit could be high as 7.5% .

High density PE Corrugated pipes and fifting manufacture in accordance with Din 16961 and pr EN 13476-1 , ISO 9969 (that is same as BS standard) and ISIR 9916 standards .

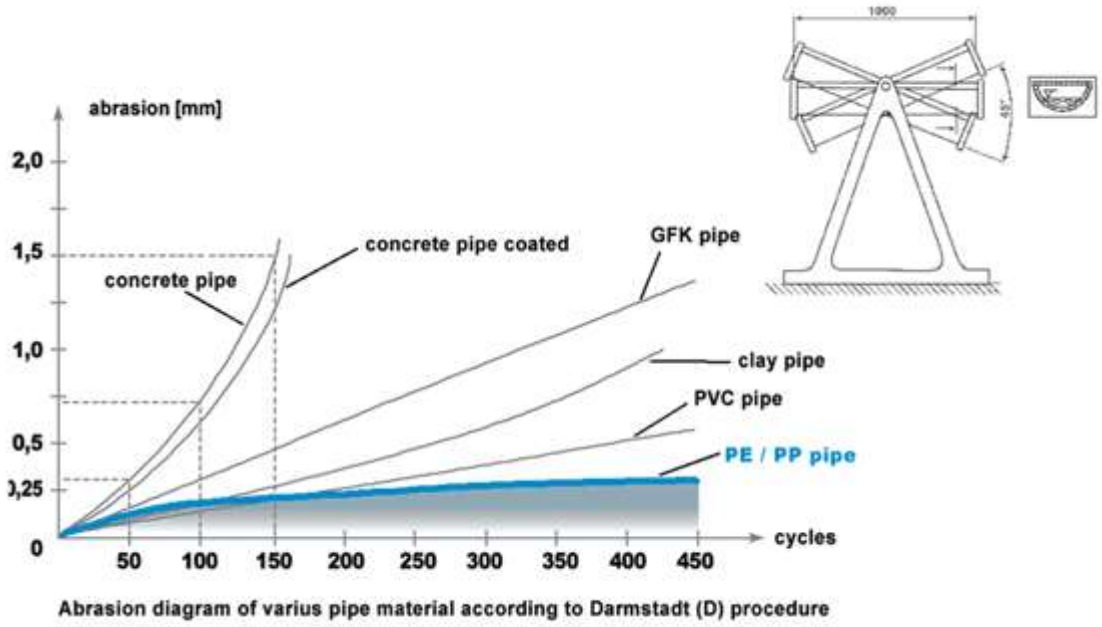
So on base of standards we tested production Corrugate pipes with as below Scope:

- MFI (Melt flow index) of material
- Dimention **inspec**tion
- Short and long stiffness

  Felxability of pipes
- Falling test
- Carbon detect
- Fitting test about leakage of rubber

Specification

High abrasion resistance belongs to the most distinctive features of PE pipes among other materials used in pipeline construction. Owing to this advantage, PE pipes are used for transport of sludge, sand and other highly abrasive media. Pipes made of commonly used materials were tested using the Darmstadt method. Pipe samples were filled with water and sand mixture and subjected to cyclic swinging motion. The amount of the rubbed off pipe wall material was regularly measured. Test results demonstrate high abrasion resistance of polyethylene pipes. For example, a 0.3 mm loss of PE pipe surface was measured after 400,000 cycles while the loss measured for glass fibre pipes (GRP) was 6-8 times greater.



Abrasion diagram of varius pipe material according to Darmstadt (D) procedure

CHARACTERISTICS AND TECHNICAL DATA

- Material: HDPE 80-100
- Standard: DIN 16961-ISIRI 9116
- Density:> 0.945 kg/m3
- Dispensing index: MFI 190 ˚C/5 Kg 0.35-1.3 gr/10 ’
- Elasticity modulus: >800 MPa
- Coefficient of linear thermal expansion: 0.17 mm / m˚K

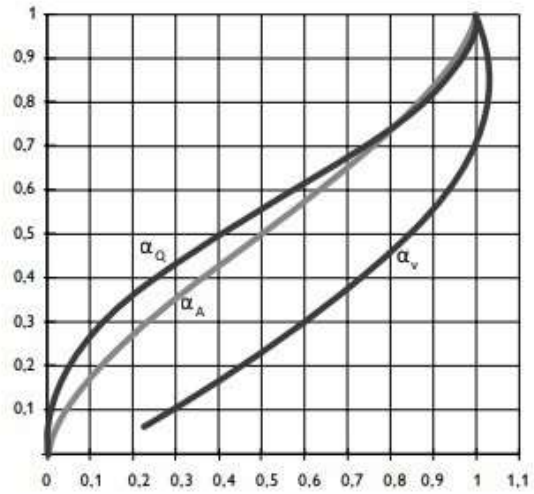
- Thermal conductivity coefficient: at 23 ˚C ~ 0.36-0.5 W/mk
- Surface electrical resistance: > 1013
- The connection method is via a socket without an eraser
- Laying and use of HDPE pipeline is from -40 ˚C to +60 ˚C.
- Ring strength SN = 4-8 KN/m2 (ISO 9969) SHORT TIMES AND DIN16961-2 (LONG TIMES)
- Carbon content: 2-2.5%(ISO6964)
- The Carbon description: <= 3 (BS 2782)
- OIT : more than 20 min (ISO11357-6)
- The standard color is WHITE AND BLACK

CHEMICAL RESISTANCE

* High chemical resistance to a large number of compounds. * Plastic pipes and fittings - Combined chemical resistance classification table ISO 10358

FLOW THROUGH PARTIALLY FILLED CONDUITS

When designing gravity flow conduits, their partial filling is often assumed. Consequently, the formulas applying to fully filled conduits are corrected accordingly by introducing a coefficient depending on the h/dw ratio (see the diagram next to this text)



. αQ – flow rate for partially filled conduit to flow rate for fully filled conduit ratio (–)

.αv – flow velocity for partially filled conduit to flow velocity for fully filled conduit ratio (–)

.αA – fluid stream cross section for partially filled conduit to conduit cross section ratio (–)

MATERIAL		ABSOLUTE ROUGHNESS	FLOW RATE	FLOW CAPACITY REDUCTION AS COMPARED WITH PE AND PP PIPES
		K (mm)	Q (l/sec)	%
PE		0.001	235	0
STEEL	NEW	0.1	220	6.4
	OLD	3.0	153	34.9
PVC	NEW	0.05	227	3.4
	OLD	0.07	224	4.7
REINFORCED CONCRETE	NEW	0.5	193	17.9
	OLD	3.0	153	28.1

A FLOW THROUGH THE FULLY FILLED CONDUIT

The hydraulic analysis of gravity flow conduits is based on correct relations between variables of a flow and flow resistance resulting in velocity and potential energy losses. Hydraulic resistance is expressed as a loss of pressure head along the pipe length and as local losses resulting from disturbances of the stream. These relations are defined by the following Darcy-Weisbach formul:

1

$$i = \frac{\lambda \cdot v^2}{d_w \cdot 2 \cdot g} \cdot \left(1 + \frac{\kappa}{100\%}\right)$$

I – unit pressure drop (–) lub (‰)

g – acceleration of gravity (m2 /sec)

λ – hydraulic resistance coefficient (–)

dw – conduit inside diameter (m)

v – mean velocity of flow (m/sec)

κ – proportional allowance for local losses as part of losses over conduit length (%)

2 2

$$v = \frac{4 \cdot Q}{\pi \cdot d_w^2}$$

Q – mean flow rate (m3 /sec) Turbulent flow occurs in transient range between hydraulically smooth and totally rough conduits (the so called B zone) in pipelines with free surface of liquid.

For such flow conditions, hydraulic resistance coefficient representing resistance generated at the point of contact between liquid and the conduit wall, can be determined using the ColebrookeWhite formula (3):

3

$$\frac{1}{\sqrt{\lambda}} = -2 \cdot \log \left(\frac{2.51}{R_e \cdot \sqrt{\lambda}} + \frac{k}{3.71 \cdot d_w} \right)$$

k – absolute roughness of conduit wall surface (m)

Re – Reynolds number calculated from the

4

$$R_e = \frac{v \cdot d_w}{\nu}$$

v – mean velocity of flow (m/sec)

v – coefficient of kinematic viscosity (m2 /sec

Values of the coefficient of kinematic viscosity v (m2 /sec) depending on temperature and concentration of the matter suspended in liquid wastes

TEMPERATURE °C	WATER	LIQUID WASTES WITH CONCENTRATION OF SUSPENDED MATTER		
		100 mg/l	300 mg/l	500 mg/l
2	1.67×10^{-6}	2.17×10^{-6}	3.17×10^{-6}	4.17×10^{-6}
5	1.52×10^{-6}	1.60×10^{-6}	1.76×10^{-6}	1.92×10^{-6}
10	1.31×10^{-6}	1.33×10^{-6}	1.37×10^{-6}	1.41×10^{-6}
20	1.01×10^{-6}	1.02×10^{-6}	1.02×10^{-6}	1.04×10^{-6}
25	0.90×10^{-6}	0.90×10^{-6}	0.91×10^{-6}	0.92×10^{-6}

In the existing design practice, a fixed value of the coefficient of kinematic viscosity both for water and liquid wastes is usually assumed:

v = 1,31 × 10-6 m2 /sec for water (liquid wastes) temperature of 10° C

The conduit wall relative roughness depends on the conduit material and pipe inside wall surface wear. Regarding PE pipes, the standard value for k is 0.01 mm. By assuming respective roughness the type of transported liquid may be modelled. For pipelines carrying liquids containing considerable amount of deposits bigger roughness should be assumed – according to their content and up

to a value between 0.05 and 0.4 mm. If the above formulas are combined in one and standard liquid temperature is assumed at 10 degrees Celsius, the mean flow rate can be calculated using the following formula:

5

$$Q = -6.598 \cdot \log\left(\frac{0.741}{10^6 \cdot d_w \cdot \sqrt{d_w \cdot i}} + \frac{k}{3.71 \cdot d_w}\right) \cdot d_w \cdot \sqrt{d_w \cdot i}$$

6

$$i_{min} = \frac{\tau_{min}}{\gamma \cdot Rh}$$

This formula no.5 is a basis for preparing flow nomograms. It combines three quantities essential in hydraulic dimensioning – rate of flow, pipe bottom falling gradient (pressure drop) and pipe diameter. Based on the flow nomograms it is possible to determine one of the three values mentioned above if two values are known.

Formule of 6 :

Rh – Hydraulic radius (m)

τ min – minimum tangential stress on the pipe liquid border (N/m2)

The value of the radius used in the above formula should correspond to

the type of liquid flowing through a pipe. In case of industrial and municipal waste water systems - hydraulic radius corresponding to filling ratio of 60% is assumed, while in case of rain-water disposal systems they are considered as fully filled with water. Minimum tangential stresses are assumed 2.20 N/m2 and 1.47 N/m2 respectively

Jointing Technical

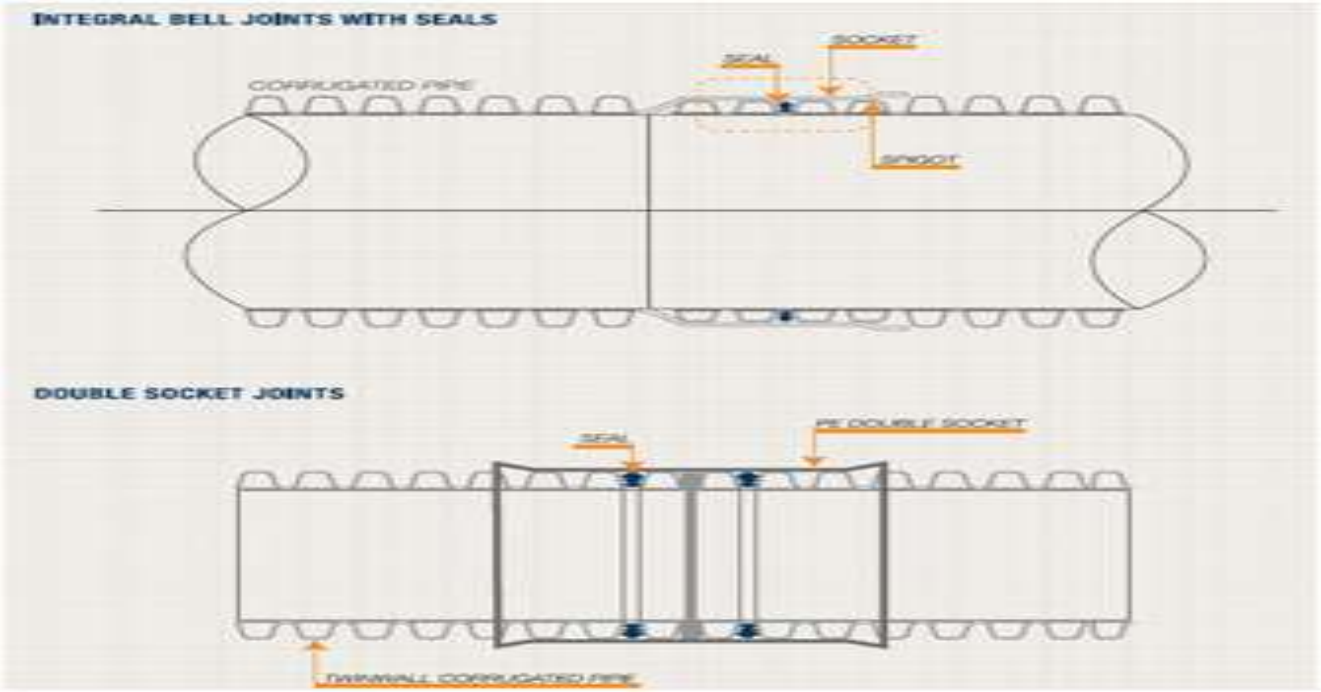
Ghaidr louleh recommends jointing of the inline belling Corrugated Pipes by seal and integral cuff joints OR double socket joints.

Integral inline belling Joints or cuff with Seals

Integral cuff joints have a cuff at one end and a spigot at the other end. The technique is a push-to-fit method with the seal made of a high quality EPDM, specifically designed to mold with the corrugation of the pipe's outer surface. The adventage of our inline belling is produce by two layer so the stiffness is more better than one layer.

Double Socket Joints

Double Socket Joints can be used with a pair of specifically designed EPDM-681-1 rubber seals to match the normal corrugations of the pipes and to provide a leak proof joint. (This method can be used for plain profile pipes OR maintenance and repair)



Laying Pipe

Before pipe is laid into the trench, reinspect the pipe for any damage and clean any debris that may have accumulated on the inside of the pipe or sealing surfaces

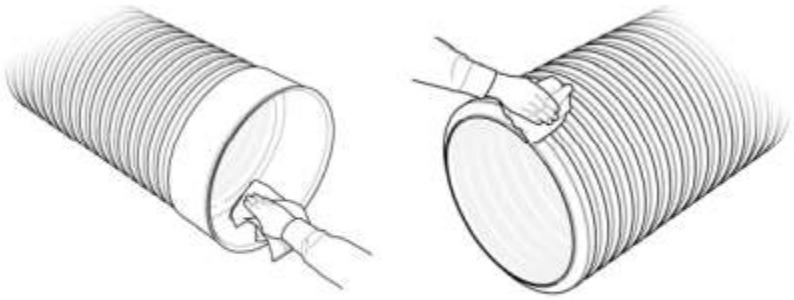


Figure 8 - Cleaning Sealing Surfaces of Pipe

. Pipe should also be checked to ensure that it is the correct type and size. The pipe should be lowered into the trench using slings placed in a manner that evenly supports the pipe. It is good practice to use a "tag lin e" when moving the pipe into position; this is a line attached to the end of the pipe, used to prevent uncontrolled pipe movement.

Pushing the bell onto a spigot increases the likelihood of forcing bedding material into the joint, disrupting the gasket and severely undermining watertight performance. With this in mind, pipe laying should begin at the lowest point of the project with spigots pointed downgrade . With the spigot ready to be inserted into the bell, remove the protective film around the gasket

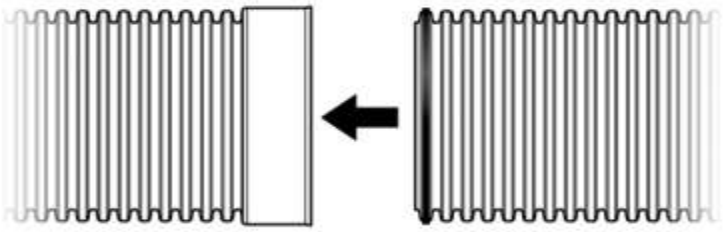


Figure 9 - Integral Bell and Spigot Connection

Use a clean brush, cloth rag

sponge or gloved hand to apply approved pipe lube to both the gasket an d the bell. Do not allow lubricated section to contact dirt or backfill. For eign matter could adhere to the lubricated surface and compromise the joint integrity. Failure to properly lubricate the joint will adversely affect the joint performance and will increase the force needed to push the join t “home”. Pushing the pipe together may be accomplished in a number of ways: smaller diameter pipe may be pushed together by hand or leve raged together using a spanner block and a lever as shown in Figure 10.

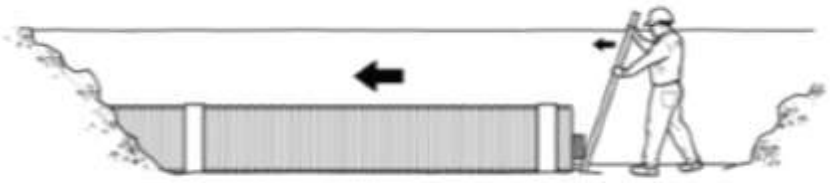


Figure 10 - Installing Small Diameter Pipe

Larger diameter pipe typically requires more force to assemble which neces sitates the use of machinery, such as a backhoe. One method of using a backhoe for assembly is to use the slin ging strap to “pull” the spigot into the bell of a previously installed pipe, as shown in Figure 11

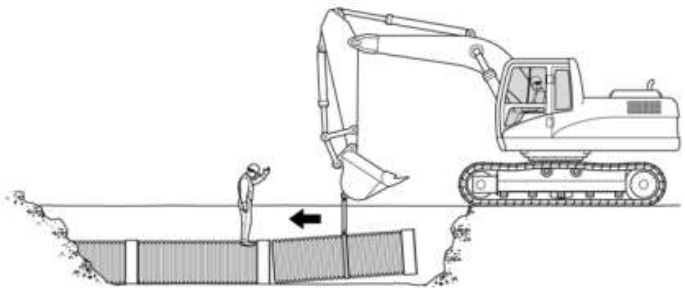


Figure 11 - Installing Large Diameter Pipe with Sling

Another method involves pushing the pipe joints together. For this method, a sacrificial spigot or portion of pipe is placed inside the bell of the pipe

to be installed, and then the assembly is pushed into the bell of a previously installed pipe, as shown in Figure 12.

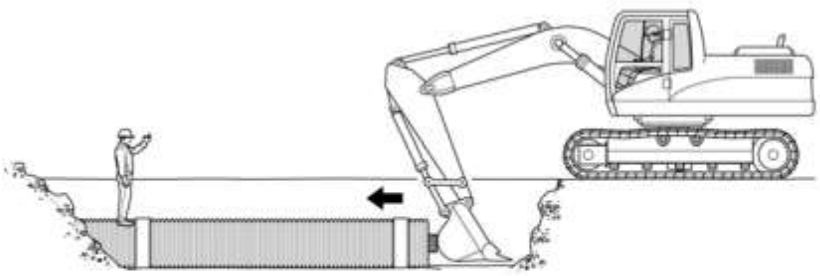


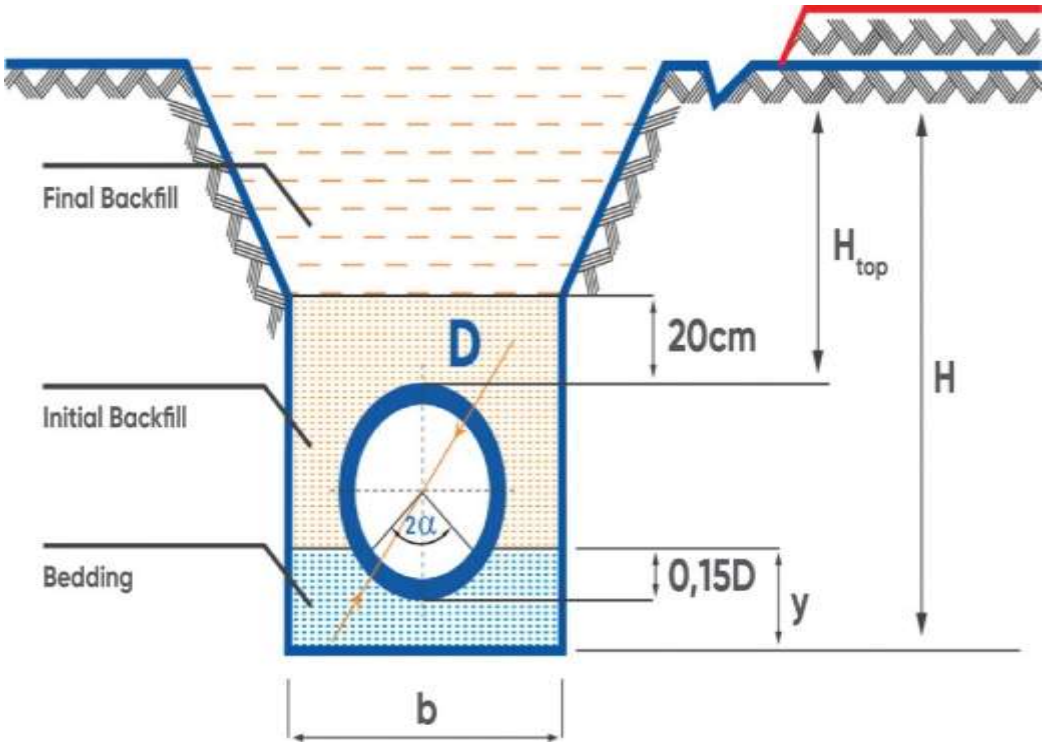
Figure 12 - Installing Large Diameter Pipe with Stub

Installation of corrugate pipes

When working with trench boxes, it is critical to prevent disruption of the pip e installation while moving the trench box. If the trench box cannot be drag ged without disrupting the pipe or initial backfill, it must be lifted in sections. Water inside of the trench should be controlled before and during the pipe installation. The pipe should only be installed during dry conditions, never with running or standing water in the trench bottom. This may require control of surface and subsurface water sources by the following methods: sump pumps, wells or well points, drainage blankets, water tight sheathing,

and/or sheeting. Control of water sources should be maintained until initial backfill has been installed and there is an adequate amount of final backfill to prevent floatation. The use of antiFloatation restraints such as collars or a nchors may be used, if deemed necessary. It should be noted that OSH A standards change from time to time. In the event any of these recommen dations are in conflict with OSHA, and local safety requirements or specif ic site conditions warrant alternative safety precautions, contact a qualified e ngineer.

- FINAL BACKFILL: Uncompacted soil filling. (Except for road crossings)
- INITIAL BACKFILL: Compressed earth filling, free from hard objects
- BEDDING: Compressed sand
- H: Trench Depth (cm)
- Height top: The distance between the pipe top level and the ground (cm)
- b: Trench Width (cm)
- Y: Cushion Layer Height (cm)
- D: Pipe Outer Diameter (mm)
- 2 : Bedding Angle in Degrees



Trench or Sewer Construction

Information provided in this pocket installation guide intended as a quick reference only and does not replace the requirements specified in the project plan.

Trenches or gutters should be wide enough to be placed and weigh the refill around the entire pipe.

In table 2 for recommended minimum trench width. Design engineers can modify the width of the trench based on site-specific conditions.

Table 2:

Minimum Trench Widths	
Pipe Diameter in. (mm)	Trench Width in. (m)
4 - 8 (100 - 200)	*
10 (250)	28 (0.7)
12 (300)	30 (0.8)
15 (375)	34 (0.9)
18 (450)	39 (1.0)
24 (600)	48 (1.2)
30 (750)	56 (1.4)
36 (900)	64 (1.6)
42 (1050)	72 (1.8)
48 (1200)	80 (2.0)
54 (1350)	88 (2.2)
60 (1500)	96 (2.4)

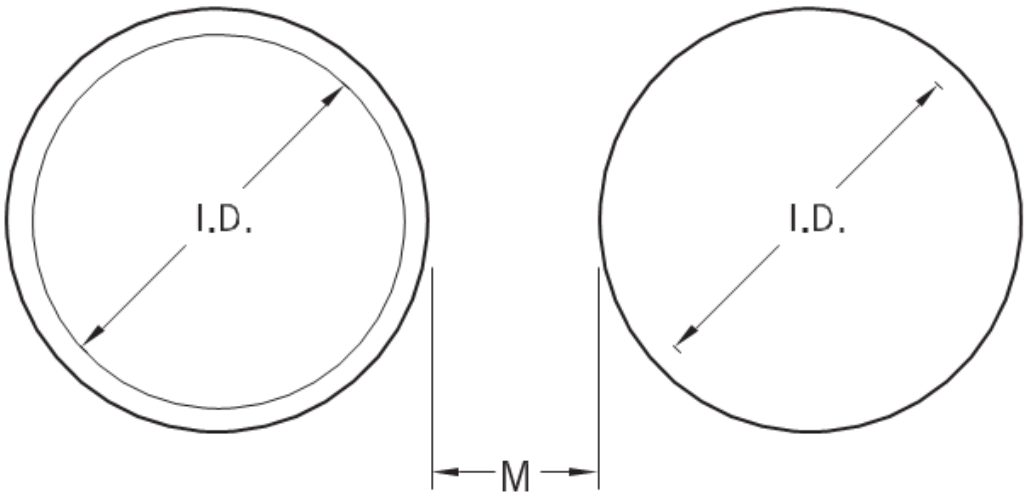
*Usually dependent on smallest bucket size available.

***** The trench width of 4-8 inch pipes is 21-25 inch*****

For parallel pipe installations, provide spacing between pipes for proper compaction. See figure 1 for minimum pipe spacing.

***Placement will be different for a retention / detention system h System because of the intended use of this product.**

Figure 1: Parallel Pipe Installation



UP TO 24" (600MM) I.D.: M=12" (300MM)
MORE THAN 24" (600MM) I.D.: M=1/2 I.D.

Basic trenches or trenches containing bedrock, dirt or soft debris, or other materials which can not provide support for long-term pipeline, arrangements can not be recommended.

All unsuitable foundations must be dug before the pipe installation take place.

If the base of trench in unstable, contractor must dig to depth required by the engineer and replace with appropriate material as determined by the engineer.

If native land can migrate to the pile, use synthetic cloth (geotextile) to separate the original land from the heap.

Trench Boxes/Sewers

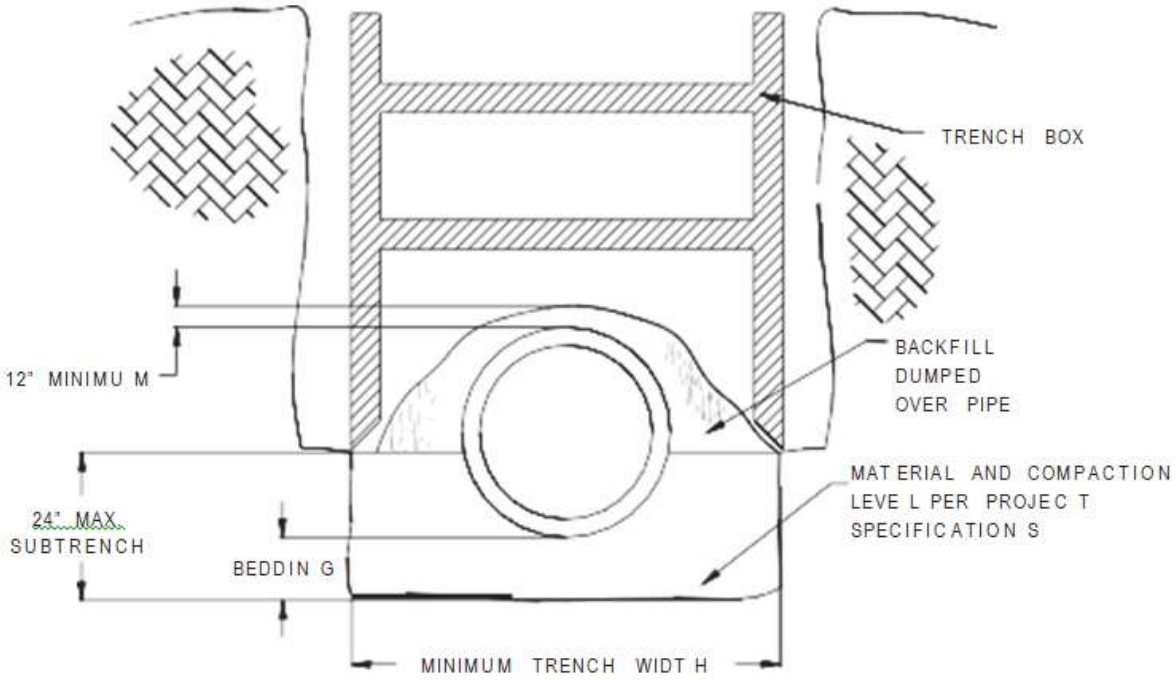
Trench boxes provide a safe work area for installing pipes in deep trenches or on land where stability is inadequate. Always follow the OSHA (Occupational Safety and Health Administration) requirements for Indonesia are P2K3 requirements when using a trench box.

The length of the trench box must be suitable for the length of the pipe. The nominal length for the pipe is 6.1 m (20 feet) although shorter lengths can be provided.

The most effective way to maintain a sound system is to provide 'subparits' for pipe and refill use. The subparit must not be more than 24 "above the bottom of the trench as shown in Figure 2. Refill and compact in accordance with the design specifications in the subparit.

The trench box can be pulled along the upper edge of the subtrench without affecting the embankment in the pipe planting zone.

Figure 2: Subtrench Installation



In installations not involving a subtrench, dragging a trench box should only be done if it does not damage the pipe or disrupt the backfill; otherwise, the box should be lifted vertically into its new position, again taking great care not to disturb the pipe or backfill

Connection To Manholes and Catch Basins

Connection of High Density Polyethylene (HDPE) pipe to manholes and catch basins is often required in drainage installations. Manholes and catch basins allow a change in grade or direction as well as a change in pipe size along the pipe system. They also provide cleanout access and each may serve as an inlet for water in the case of storm sewers. BOSS HDPE corrugated pipe is easily connected to these structures. For soil-tight performance the pipe or adaptor is grouted directly to the manhole or catch basin. For watertight connections, either a compression style connection or rubber gasket connection is commonly used. The connection method chosen is dependent on local regulations, project requirements, type of watertight pipe and structure.

SOIL-TIGHT PERFORMANCE

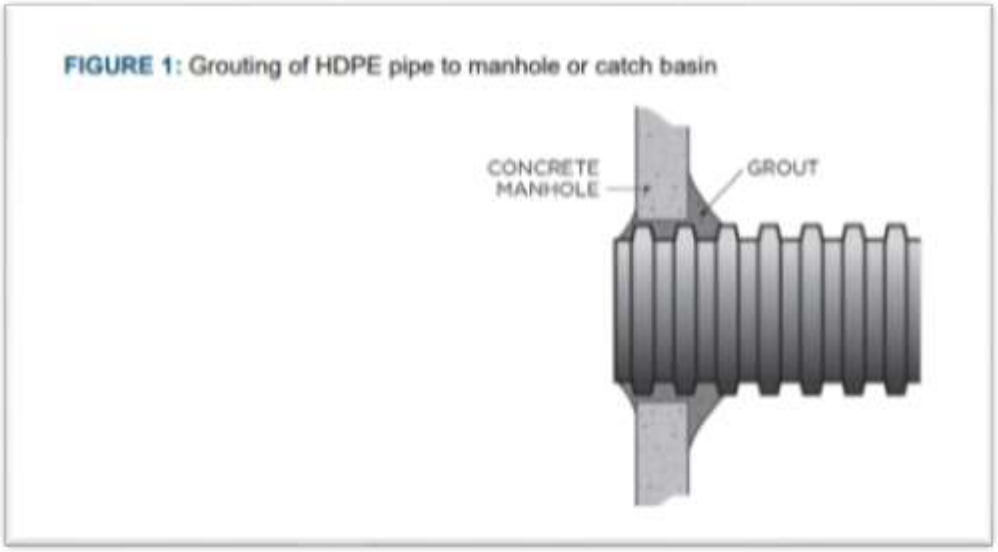
When soil-tight service is required, there are two options for connecting BOSS HDPE pipe to manholes and catch basins.

1. Grouting HDPE Pipe to Structure

CORRUGATE AND HDPE pipe can be inserted into the structure and a concrete collar poured around the connection, filling the void between the outside of the pipe and the structure itself (Figure 1). The grout mixture should be pressed between the corrugated pipe and the manhole to ensure a soil-tight connection. This method can be used when the pipe joint is near

the manhole or catch basin connection. The corrugated exterior of GHADIR pipe provides a surface on which grout will conform and harden, producing a positive soil-tight connection.

FIGURE 1: Grouting of HDPE pipe to manhole or catch basin



2. Grouting HDPE Adaptor to Structure

Fabricated HDPE fittings are also available for grouting directly into a new or existing manhole structure. The adaptor consists of a section of GHADIR pipe with a bell end. Figure 2a shows the connection for a new manhole structure where the fitting is cast in-place. Figure 2b shows the connection into an existing manhole structure where the fitting is grouted in. Once the

adaptor fitting is in place, the gasketed HDPE pipe end is inserted into the bell end of the adaptor. Fitting diameters range from 100mm to 500 mm.

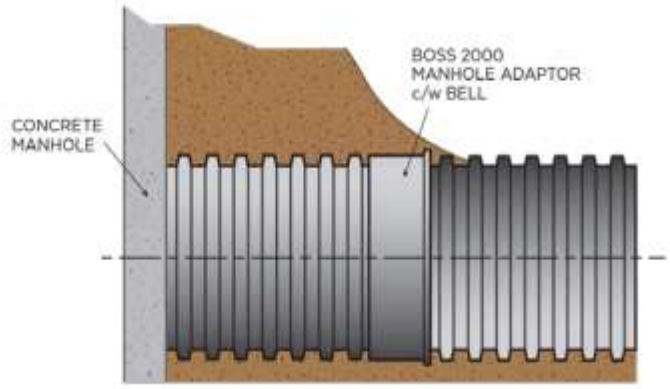
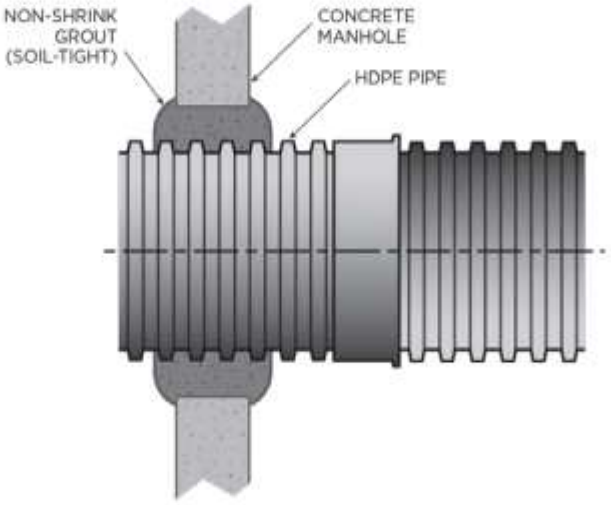


FIGURE 2b: Detail of manhole adaptor connection for existing manhole structure



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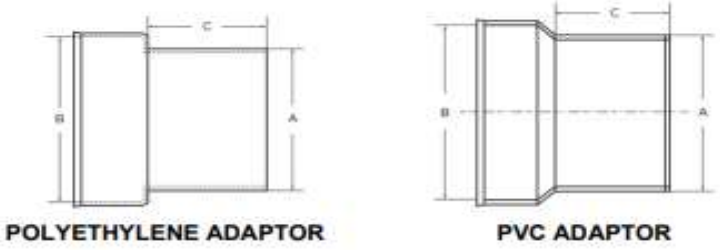
WATERTIGHT PERFORMANCE OR RUBBER

Manhole connection systems are also available from a variety of manufacturers for watertight service. These include compression connectors and grout-in connectors.

1. Compression Connector

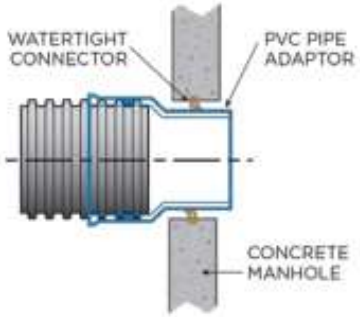
A flexible compression connector provides a watertight seal between the pipe and the wall of the concrete structure. Pipe adaptors are required to provide a smooth outer pipe surface for a sealed connection to the structure.

FIGURE 3: Pipe adaptors for BOSS HDPE pipe



The appropriate fitting is used in conjunction with a watertight connector which is cast in place to the concrete manhole or catch basin structure (Figure 4).

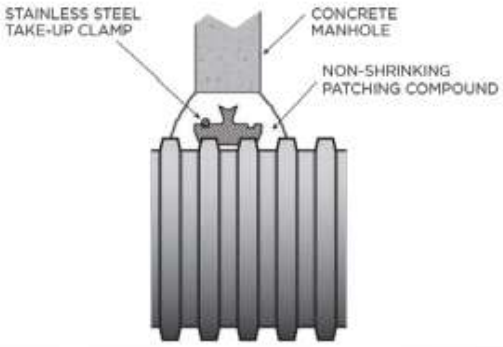
FIGURE 4: Compression connection



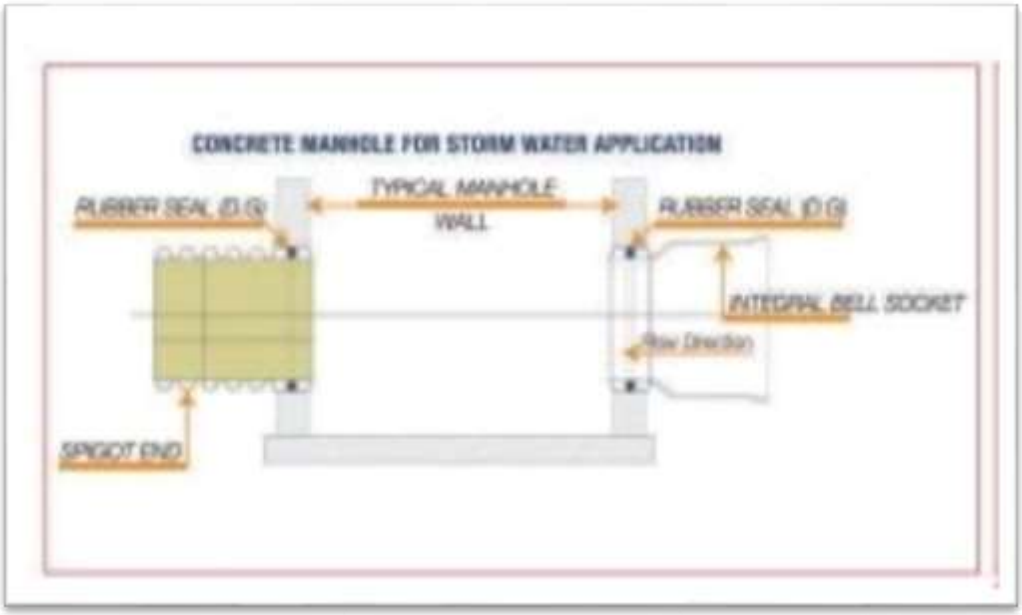
2. Gasket Connector

Gasket connectors are an alternative watertight connection option for BOSS HDPE pipe. A rubber gasket is compressed around the pipe circumference using stainless steel clamps, preventing infiltration and exfiltration between the gasket and the pipe. It is then either grouted into an existing structure (Figure 5), or has a new structure poured around it. When grouted, the HDPE Waterstop becomes a monolithic part of the manhole.

FIGURE 5: Gasket connection



IN THE FINAL THE CONNECTION OF CORRUGATE AND PE PIPE TO MANHOLE .WE SHOE IN THE FOLOWING PICTURE :



Water PE Pipes

high-density polyethylene (HDPE) pipe has become the ideal material for piping systems used to transport drinking water. As a tough and resilient material capable of lasting 100 years or more with minimal maintenance, HDPE pipe has proven to be superior to many other piping materials as a means transporting and distributing potable water. HDPE pipe's long service life and low maintenance costs, coupled with its' ability to be installed with a variety of trench-less technologies leads to HDPE pipe having the lowest life cycle costs of any potable water piping system.we are producing PE pipe from 16-400mm

with pressure of 6-8-10-12-16 bar .if u need bigger size we can provide from our partner Co.

Wallthickness and mass table according to DIN 8074

PIPE SERIES	25		20		16		12.5		10.5		10		8.3		8		6.3		5		4		3.2		2.5		2	
SDR	51		41		33		26		22		21		17.6		17		13.6		11		9		7.4		6		5	
PE63	PN2		PN2.5		PN3.2		PN4		PN4.8		PN5		PN6		PN6.3		PN8		PN10		PN12.4		PN15.9		PN19.9		PN24.9	
PE80	PN2.5		PN3.2		PN4		PN5		PN6		PN6.3		PN7.5		PN8		PN10		PN12.5		PN16		PN20		PN25		PN32	
PE100	PN3.2		PN4		PN5		PN6.3		PN7.5		PN8		PN9.6		PN10		PN12.5		PN16		PN20		PN25		PN32		PN40	
d mm	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m	s mm	mass in kg/m
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	0.048	2.0	0.052
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	0.060	2.0	0.064	2.4	0.074
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	0.084	2.2	0.099	2.7	0.115	3.3	0.133
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	0.107	1.9	0.112	2.3	0.133	2.8	0.154	3.4	0.180	4.1	0.207
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	0.137	1.9	0.144	2.3	0.171	2.8	0.200	3.5	0.240	4.2	0.278	5.1	0.320
32	-	-	-	-	-	-	-	-	-	-	-	-	1.8	0.179	1.9	0.187	2.4	0.232	2.9	0.272	3.6	0.327	4.4	0.386	5.4	0.454	6.5	0.520
40	-	-	-	-	-	-	1.8	0.227	1.9	0.238	1.9	0.239	2.3	0.285	2.4	0.295	3.0	0.356	3.7	0.430	4.5	0.509	5.5	0.600	6.7	0.701	8.1	0.809
50	-	-	-	-	1.8	0.287	2.0	0.314	2.3	0.361	2.4	0.374	2.9	0.440	3.0	0.453	3.7	0.549	4.6	0.666	5.6	0.708	6.9	0.936	8.3	1.09	10.1	1.26
63	-	-	1.8	0.364	2.0	0.399	2.5	0.494	2.9	0.563	3.0	0.580	3.6	0.688	3.8	0.721	4.7	0.873	5.8	1.05	7.1	1.26	8.6	1.47	10.5	1.73	12.7	1.99
75	1.8	0.436	1.9	0.457	2.3	0.551	2.9	0.675	3.5	0.807	3.6	0.828	4.3	0.976	4.5	1.02	5.6	1.24	6.8	1.47	8.4	1.76	10.3	2.09	12.5	2.44	15.1	2.82
90	1.8	0.525	2.2	0.643	2.8	0.791	3.5	0.98	4.1	1.14	4.3	1.18	5.1	1.39	5.4	1.46	6.7	1.77	8.2	2.12	10.1	2.54	12.3	3.00	15.0	3.51	18.1	4.05
110	2.2	0.786	2.7	0.943	3.4	1.17	4.2	1.45	5.0	1.67	5.3	1.77	6.3	2.08	6.6	2.17	8.1	2.62	10.0	3.14	12.3	3.78	15.1	4.49	18.3	5.24	22.1	6.04
125	2.5	1.00	3.1	1.23	3.9	1.51	4.8	1.84	5.7	2.16	6.0	2.27	7.1	2.66	7.4	2.76	9.2	3.37	11.4	4.08	14.0	4.87	17.1	5.77	20.8	6.75	25.1	7.79
140	2.8	1.25	3.5	1.54	4.3	1.88	5.4	2.32	6.4	2.72	6.7	2.83	8.0	3.34	8.3	3.46	10.3	4.22	12.7	5.08	15.7	6.11	19.2	7.25	23.3	8.47	28.1	9.76
160	3.2	1.63	4.0	2.0	4.9	2.42	6.2	3.04	7.3	3.54	7.7	3.72	9.1	4.35	9.5	4.52	11.8	5.50	14.6	6.67	17.9	7.96	21.9	9.44	26.6	11.0	32.1	12.7
180	3.6	2.05	4.4	2.49	5.5	3.07	6.9	3.79	8.2	4.47	8.6	4.67	10.2	5.48	10.7	5.71	13.3	6.98	16.4	8.42	20.1	10.1	24.6	11.9	29.9	14.0	36.1	16.1
200	3.9	2.46	4.9	3.05	6.2	3.84	7.7	4.69	9.1	5.51	9.6	5.78	11.4	6.79	11.9	7.05	14.7	8.56	18.2	10.4	22.4	12.4	27.4	14.8	33.2	17.2	40.1	19.9
225	4.4	3.12	5.5	3.86	6.9	4.77	8.6	5.89	10.3	7.00	10.8	7.30	12.8	8.55	13.4	8.93	16.6	10.9	20.5	13.1	25.2	15.8	30.8	18.6	37.4	21.8	45.1	25.2
250	4.9	3.83	6.2	4.83	7.7	5.92	9.6	7.30	11.4	8.59	11.9	8.93	14.2	10.6	14.8	11.0	18.4	13.4	22.7	16.2	27.9	19.4	34.2	23.0	41.6	27.0	50.1	31.1
280	5.5	4.83	6.9	5.98	8.6	7.40	10.7	9.10	12.8	10.8	13.4	11.3	15.9	13.2	16.6	13.7	20.6	16.8	25.4	20.3	31.3	24.3	38.3	28.9	46.5	33.8	56.2	39.0
315	6.2	6.12	7.7	7.52	9.7	9.37	12.1	11.6	14.4	13.6	15.0	14.2	17.9	16.7	18.7	17.4	23.2	21.2	28.6	25.6	35.2	30.8	43.1	36.5	52.3	42.7	63.2	49.3
355	7.0	7.73	8.7	9.55	10.9	11.8	13.6	14.6	16.2	17.3	16.9	18.0	20.1	21.2	21.1	22.1	26.1	26.9	32.2	32.5	39.7	39.1	48.5	46.3	59.0	54.3	-	-
400	7.9	9.82	9.8	12.1	12.3	15.1	15.3	18.6	18.2	21.9	19.1	22.9	22.7	26.9	23.7	28.0	29.4	34.1	36.3	41.3	44.7	49.6	54.7	58.8	66.5	68.9	-	-
450	8.8	12.3	11.0	15.3	13.8	19.0	17.2	23.3	20.5	27.7	21.5	28.9	25.5	34.0	26.7	35.4	33.1	43.2	40.9	52.3	50.3	62.7	61.5	74.4	-	-	-	-
500	9.8	15.2	12.3	19.0	15.3	23.4	19.1	28.9	22.8	34.2	23.9	35.7	28.4	42.0	29.7	43.8	36.8	53.3	45.4	64.5	55.8	77.3	68.3	91.8	-	-	-	-

جدول فوق بر اساس استاندارد DIN 8074 برای مواد PE100 ، PE80 ، PE63 با ضریب ایمنی ۱/۲۵ و شرایط دمایی ۲۰ درجه و ۵۰ سال فشار کار مجاز تنظیم گردیده است.

Certificates

Our company has been approved by the Iranian Bureau of Standardization for its products and ISO from swisscert and SGS , based on certificates the export company

to the countries of Iraq, Tajikistan, Georgia, Azerbaijan and Turkmenistan.

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Mobil:00989121970655-00989125392576 Dr. shateri

CORRUGATE AND WATER PE PIPE PRODUCTION COMPANY