Mone Partners Engineering

Infrastructure & Superstructure Pipes Catalog

MONE

Mone Partners Engineering

01

About us.

As Mone Partners, we offer reliable and innovative solutions for your projects with our identity as a construction and infrastructure projects solution partner. While successfully bringing your projects to life, our expert team prioritizes quality at every stage, adding value to you through sustainable and effective collaborations. Thanks to our international experience, we execute projects in various regions around the world and provide services that meet global standards.

Additionally, by offering comprehensive consultancy services for railway and highway projects, we provide expert support at every stage of your projects. With our experience and industry knowledge, we assist you in completing your projects with the highest efficiency and success.

Why choose us?

Wide Product Range

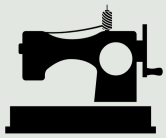
A comprehensive selection of infrastructure and superstructure pipes, ensuring a solution for every project need.

Quality and Certification

Reliable suppliers provide high-quality products that meet industry standards, such as ISO, ASTM, or EN certifications, ensuring durability and safety.

Technical Expertise and Support

In-depth knowledge and hands-on guidance from industry experts, offering support from product selection to installation and beyond.



Customization

The ability to tailor pipes and fittings to specific project requirements, including custom lengths, coatings, or materials, ensuring the product meets unique specifications and performance needs.

Cost-Effectiveness

Competitive pricing combined with durable, high-quality products, delivering long-term value and minimizing operational costs.

Strong Customer Service

Exceptional, responsive customer support that ensures smooth project execution, with ongoing assistance before, during, and after product installation.

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02

Our products.

Explore our extensive range of products.

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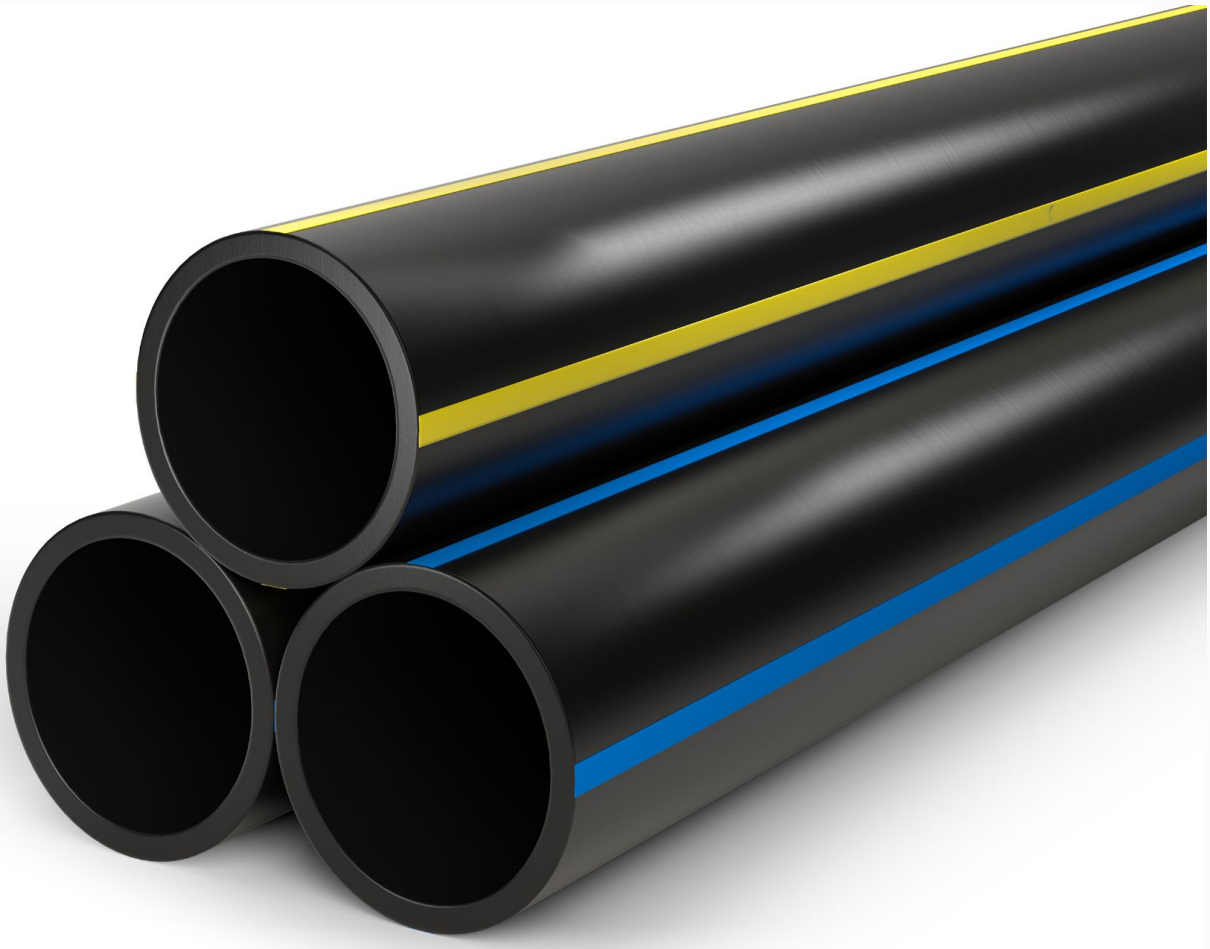
PE 100 Pipe

PE 100 pipes are a type of high-density polyethylene pipe designed for high-pressure systems, offering exceptional strength, durability, and resistance to chemicals and abrasion. They are widely used in water and gas distribution, as well as in industrial applications, providing a long-lasting, cost-effective solution for pipeline infrastructure.



Usage Areas

- Drinking Water Main Transmission Lines
- Low Pressure Lines
- In mining and fishing
- Sea discharge lines
- Lake crossings
- Chemical treatment systems
- Closed system irrigation areas
- In hydroelectric power plants
- Drainage systems
- Geothermal Pipe Systems
- Telecommunications group
- Gas discharge systems

MONE

PE 100 Pipe

Product Features

- Resistant to both slow crack and rapid crack expansion.
- Can be used in a temperature range from -50°C to +60°C, with elasticity properties protecting up to -40°C.
- Offers high resistance to chemicals, ensuring long-term durability in diverse environments.
- No carcinogenic effects, making it safe for use.
- Due to a low coefficient of friction, resistant to corrosion, even under unstable atmospheric conditions.
- Lightweight, ensuring easy portability, with insulating properties that provide added advantages.
- Highly resistant to UV rays, ensuring longevity even in outdoor applications.
- Innovative joining methods allow for easy installation, with no loss of waste and a 100% sealing capability.
- Can operate smoothly for a minimum of 50 years at nominal operating pressure.
- Raw materials ensure water retains its original taste and odor, without deterioration.
- Resistant to breaking and impacts, ensuring reliability in various conditions.
- Compatible with a variety of fire extinguishing agents, including water, foam, carbon dioxide, and powder.
- Ignition temperature is 350°C, providing excellent fire resistance.
- Poses no health risks, making it safe for potable water and other applications.

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PE 100 Pipe

Product Quality and Performance Test Results for PE 100 Pipes			
Feature	**Value**	**Unit**	**Standard Test Method**
Melt Flow Rate (190 °C / 5kg)	0.21	g/10 min	ASTM D1238
Density, 23 °C	≥ 0.930	g/cm3	ASTM D1505
Melting Point (DSC)	131	°C	ASTM D3418
Oxygen Induction Time	>20	min	TS EN 728
Volatile Substance Content	<350	mg/kg	TS EN 12099
Moisture Content	<300	mg/kg	TS EN 12118
Thermal conductivity	0,4	W/mo k	ISO 4427
Vicat Softening Point, 10 N	124	°C	ASTM D1525
Tensile Strength at Yield	24	mpa	ASTM D638
Tensile Strength at Break	31	mpa	ASTM D638
Elongation at break	875	%	ASTM D638
Flexural Modulus, 23°C	950	mpa	TS EN ISO 178
Izod Impact Strength, 23 °C (notched)	380	j/m	ASTM D256
Hardness (Shore D)	63	j/m	ASTM D2240
Environmental Stress Cracking Resistance (10% Igepal, F50)	>1000	hours	ASTM D1693

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PE 100 Pipes Dimensions and Tolerances

DN mm	Tolerances (+)*			SDR 41 PN 4			SDR 33 PN 5			SDR 26 PN 6			SDR 21 PN 8			SDR 17 PN 10			SDR13,6 PN 12,5			SDR 11 PN 16			SDR 9 PN 20			SDR 7,4 PN 25			SDR 6 P(N 32		
	A*	B*	C*	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m
16	0,3	0,3	1,2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0,3	0,10	2,3	0,4	0,11	3,0	0,4	0,12
20	0,3	0,3	1,2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,0	0,3	0,11	2,3	0,4	0,13	3,0	0,4	0,16	3,4	0,5	0,18
25	0,3	0,3	1,2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,0	0,3	0,15	2,3	0,4	0,17	3,0	0,4	0,21	3,5	0,5	0,24	4,2	0,6	0,28
32	0,3	0,3	1,3	-	-	-				-	-	-	-	-	-	2,0	0,3	0,19	2,4	0,4	0,23	3,0	0,4	0,27	3,6	0,5	0,32	4,4	0,6	0,38	5,4	0,7	0,45
40	0,4	0,4	1,4	-	-	-							2,0	0,3	0,24	2,4	0,4	0,29	3,0	0,5	0,36	3,7	0,5	0,42	4,5	0,6	0,50	5,5	0,7	0,60	6,7	0,8	0,70
50	0,4	0,4	1,4	-	-	-				2,0	0,3	0,30	2,4	0,4	0,36	3,0	0,5	0,45	3,7	0,5	0,54	4,6	0,6	0,66	5,6	0,7	0,78	6,9	0,8	0,93	8,3	1,0	1,08
63	0,4	0,4	1,5	1,8	0,3	0,36	2,0	0,3	0,39	2,5	0,4	0,47	3,0	0,4	0,57	3,8	0,5	0,71	4,7	0,6	0,87	5,8	0,7	1,04	7,1	0,9	1,25	8,6	1,0	1,46	10,5	1,2	1,69
75	0,4	0,5	1,6	1,9	0,3	0,45	2,3	0,4	0,54	2,9	0,4	0,65	3,6	0,5	0,81	4,5	0,6	1,01	5,6	0,7	1,23	6,8	0,8	1,46	8,4	1,0	1,75	10,3	1,2	2,08	12,5	1,4	2,43
90	0,6	0,6	1,8	2,3	0,3	0,64	2,8	0,4	0,78	3,5	0,5	0,94	4,3	0,6	1,16	5,4	0,7	1,45	6,7	0,8	1,76	8,2	1,0	2,11	10,1	1,2	2,53	12,3	1,4	2,99	15,0	1,7	3,51
110	0,7	0,6	2,2	2,7	0,4	0,93	3,4	0,5	1,16	4,2	0,6	1,38	5,3	0,7	1,74	6,6	0,8	2,15	8,1	1,0	2,60	10,0	1,1	3,13	12,3	1,4	3,76	15,1	1,7	4,47	18,3	2,0	5,22
125	0,8	0,6	2,5	3,1	0,5	1,22	3,9	0,5	1,50	4,8	0,6	1,79	6,0	0,7	2,25	7,4	0,9	2,74	9,2	1,1	3,35	11,4	1,3	4,06	14,0	1,6	4,87	17,1	1,9	5,76	20,8	2,2	6,74
140	0,9	0,9	2,8	3,5	0,5	1,52	4,3	0,6	1,86	5,4	0,7	2,26	6,7	0,8	2,81	8,3	1,0	3,44	10,3	1,2	4,20	12,7	1,4	5,06	15,7	1,7	6,09	19,2	2,1	7,23	23,3	2,5	8,45
160	1,0	1,0	3,2	4,0	0,5	1,97	4,9	0,6	2,40	6,2	0,8	2,96	7,7	0,9	3,69	9,5	1,1	4,50	11,8	1,3	5,48	14,6	1,6	6,64	17,9	1,9	7,94	21,9	2,3	9,42	26,6	2,8	11,03
180	1,1	1,1	3,6	4,4	0,6	2,46	5,5	0,7	3,04	6,9	0,8	3,70	8,6	1,0	4,64	10,7	1,2	5,69	13,3	1,5	6,96	16,4	1,8	8,40	20,1	2,2	10,04	24,6	2,6	11,91	29,9	3,1	13,94
200	1,2	1,2	4,0	4,9	0,6	3,02	6,2	0,8	3,81	7,7	0,9	4,59	9,6	1,1	5,75	11,9	1,3	7,02	14,7	1,6	8,53	18,2	2,0	10,36	22,4	2,4	12,42	27,4	2,9	14,73	33,2	3,5	17,21
225	1,4	1,4	4,5	5,5	0,7	3,82	6,9	0,8	4,74	8,6	1,0	5,77	10,8	1,2	7,26	13,4	1,5	8,90	16,6	1,8	10,83	20,5	2,2	13,00	25,2	2,7	15,72	30,8	3,2	18,61	37,4	3,9	21,79
250	1,5	1,5	5,0	6,2	0,8	4,79	7,7	0,9	5,88	9,6	1,1	7,16	11,9	1,3	8,89	14,8	1,6	10,91	18,4	2,0	13,34	22,7	2,4	16,12	27,9	2,9	19,32	34,2	3,6	22,98	41,5	4,3	26,87
280	1,7	1,7	9,8	6,9	0,8	5,94	8,6	1,0	7,35	10,7	1,2	8,94	13,4	1,5	11,18	16,6	1,8	13,70	20,6	2,2	16,72	25,4	2,7	20,21	31,3	3,3	24,28	38,3	4,0	28,82	46,5	4,8	33,71
315	1,9	1,9	11,1	7,7	0,9	7,46	9,7	1,1	9,32	12,1	1,4	11,37	15,0	1,6	14,10	18,7	2,0	17,35	23,2	2,5	21,19	28,6	3,0	25,58	35,2	3,7	30,72	43,1	4,5	36,48	52,3	5,4	42,66
355	2,2	2,2	12,5	8,7	1,0	9,49	10,9	1,2	11,78	13,6	1,5	14,40	16,9	1,8	17,86	21,1	2,3	22,09	26,1	2,8	26,87	32,2	3,4	32,47	39,7	4,1	39,01	48,5	5,0	46,25	59,0	6,0	54,19
400	2,4	2,4	14,0	9,8	1,1	12,03	12,3	1,4	15,01	15,3	1,7	18,26	19,1	2,1	22,72	23,7	2,5	27,91	29,4	3,1	34,07	36,3	3,8	41,23	44,7	4,6	49,49	54,7	5,6	58,75			
450	2,7	2,7	15,6	11,0	1,2	15,17	13,8	1,5	18,90	17,2	1,9	23,09	21,5	2,3	28,81	26,7	2,8	35,36	33,1	3,5	43,16	40,9	4,2	52,21	50,3	5,2	62,66	61,5	6,3	74,32			
500	3,0	3,0	17,5	12,3	1,4	18,89	15,3	1,7	23,31	19,1	2,1	28,49	23,9	2,5	35,56	29,7	3,1	43,70	36,8	3,8	53,25	45,4	4,7	64,42	55,8	5,7	77,22						
560	3,4	3,4	19,6	13,7	1,5	23,52	17,2	1,9	29,34	21,4	2,3	35,75	26,7	2,8	44,51	33,2	3,5	54,74	41,2	4,3	66,81	50,8	5,2	80,70	62,5	6,3	96,43						
630	3,8	3,8	22,1	15,4	1,7	29,75	19,3	2,1	37,01	24,1	2,6	45,29	30,0	3,1	56,24	37,4	3,9	69,33	46,3	4,8	84,45	57,2	5,9	102,25	70,3	7,2	132,5						
710	6,4	6,4	24,9	17,4	1,9	37,86	21,8	2,3	47,04	27,2	2,9	57,61	33,9	3,5	71,52	42,1	4,4	87,97	52,2	5,4	107,28	64,5	6,7	129,97									
800	7,2	7,2	28,0	19,6	2,1	48,01	24,5	2,6	59,58	30,6	3,2	73,02	38,1	4	90,58	47,4	4,9	111,55	58,8	6,0	136,09												
900	8,1	8,1	31,5	22,0	2,3	60,55	27,6	2,9	75,47	34,4	3,9	92,35	42,9	4,6	114,77	53,3	5,5	141,11	66,1	6,7	172,29												
1000	9,0	9,0	35,0	24,5	2,6	74,98	30,6	3,2	92,96	38,2	4,0	114,55	47,7	4,9	141,83	59,3	6,1	174,39	73,4	7,5	212,64												

A* : Largest pipe outer diameter tolerance,mm (+ as)

SDR : Standard aspect ratio = Outer diameter / Wall thickness

S* : Wall thickness tolerance, mm (+ as)

DN : Outer Diameter

(S) : Shows pipe series.

S : Wall thickness

w : Kilogram unit of weight

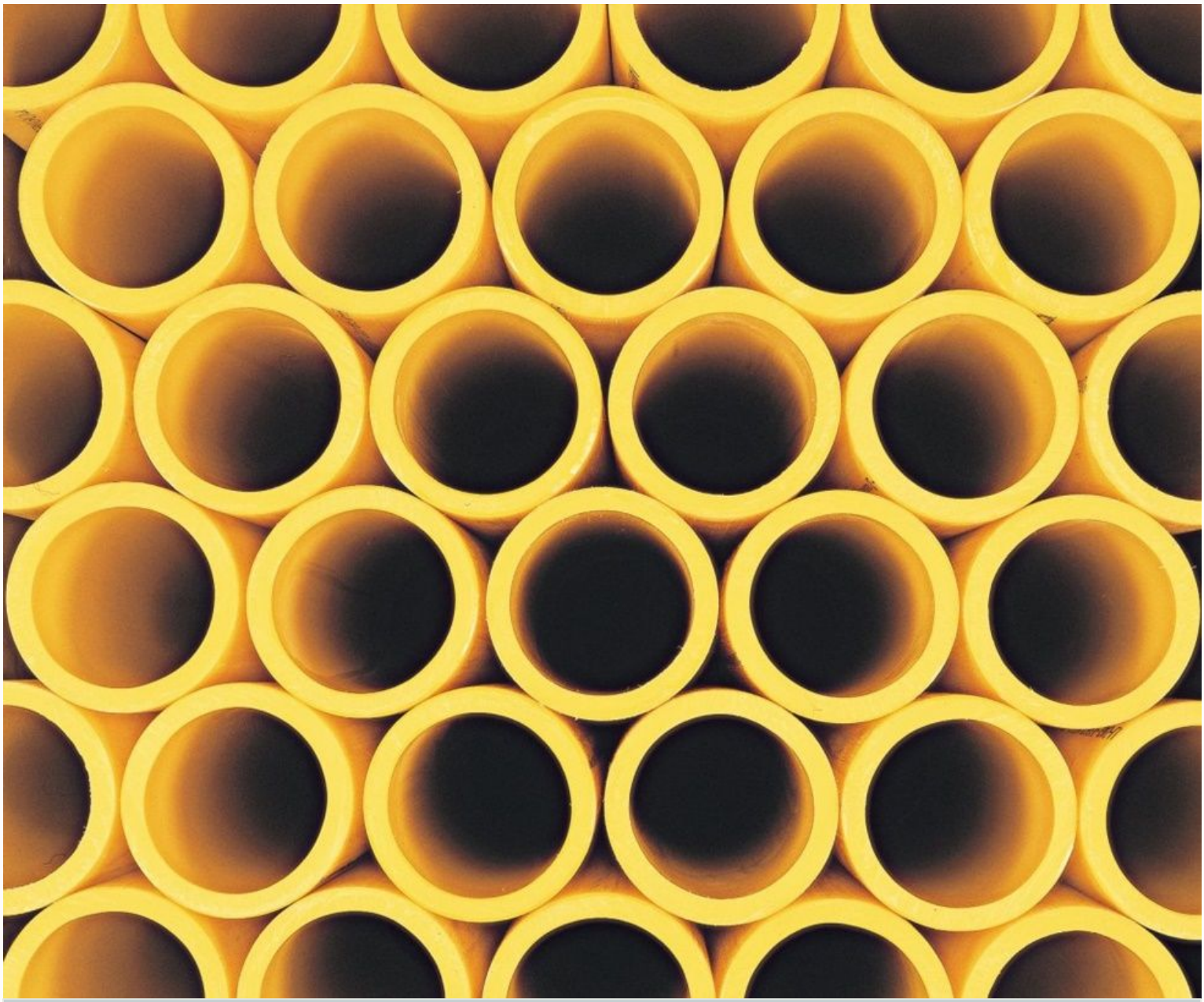
* : Letters preceded by an ' * ' show tolerances.

PE 100 Pipe

MONE

Natural Gas Pipe

Mone`s natural gas pipes, made from durable and flexible polyethylene (PE 80 and PE 100), are ideal for natural gas distribution. They offer excellent impact resistance, even at low temperatures, and are commonly used in diameters ranging from Ø16 mm to Ø630 mm, available in straight lengths or coils with customizable options.



Natural Gas Pipe

Product Quality and Performance Test Results for Natural Gas Pipes			
Feature	**Parameters**		**Standard Test Method**
Density	≥ 930 kg/m3	23 °C	EN ISO 1183-1
Melt Flow Rate (Raw Material)	0.2 ≤ mfr ≤ 1,4	5 Kg, 190 °C, 10 min.	EN ISO 1133
Melt Flow Rate (Pipe)	Compared with the raw material, the difference should be at most 20%.	5 Kg, 190 °C, g/10 min.	EN ISO 1133
Elongation at Break	≥ % 350	23 °C	EN ISO 6259-1 ISO 6259-3
Dimensional Stability	≤ 3%	1 hour, 110 °C	EN ISO 2505
Hydrostatic Strength	No damage should be observed on the test piece during the test.	100 hour 20 °C 165 hour 80 °C 1000 hour 80 °C	EN ISO 1167-1 EN ISO 1167-2
Oxidation İnduction Time	≥ 20 min	15 mg ± 2, 190 °C, With oxygen	ISO 11357-6
Carbon Black Content	% 2 - 2.5	550 °C / 900 °C	ISO 6964
Pigment Dispersion	Partition Degree must be A1, A2, A3 or B	150 ~ 210 °C	ISO 18553
Resistance to Slow Crack Growth	10 mm/day	e ≤ 5 mm	ISO 13480
Resistance to Slow Crack Growth	No damage should be observed on the test piece during the test.	e > 5 mm at 80 °C for 500 hrs under 8 bar	EN ISO 13479
Resistance to Fast Crack Growth	pc ≥ 1.5 MOP pc = 3.6 pc,s4 + 2.6	0 °C	EN ISO 13477
Volatile Content	≤ 350 mg/kg	65 min 105 °C	EN 12099

Natural Gas Pipe

Natural Gas Pipes Dimensions and Tolerances

DN mm	Tolerances (+)*			SDR 17.6			SDR 17			SDR 11		
	A*	B*	C*	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m
16	0.3	0.3	1.2	-	-	-	-	-	-	-	-	-
20	0.3	0.3	1.2	-	-	-	-	-	-	-	-	-
25	0.3	0.3	1.2	-	-	-	-	-	-	-	-	-
32	0.3	0.3	1.3	-	-	-				-	-	-
40	0.4	0.4	1.4	-	-	-						
50	0.4	0.4	1.4	-	-	-				2.0	0.3	0.30
63	0.4	0.4	1.5	1.8	0.3	0.36	2	0.3	0.39	2.5	0.4	0.47
75	0.4	0.5	1.6	1.9	0.3	0.45	2.3	0.4	0.54	2.9	0.4	0.65
90	0.6	0.6	1.8	2.3	0.3	0.64	2.8	0.4	0.78	3.5	0.5	0.94
110	0.7	0.6	2.2	2.7	0.4	0.93	3.4	0.5	1.16	4.2	0.6	1.38
125	0.8	0.6	2.5	3.1	0.5	1.22	3.9	0.5	1.5	4.8	0.6	1.79
140	0.9	0.9	2.8	3.5	0.5	1.52	4.3	0.6	1.86	5.4	0.7	2.26
160	1.0	1.0	3.2	4.0	0.5	1.97	4.9	0.6	2.4	6.2	0.8	2.96
180	1.1	1.1	3.6	4.4	0.6	2.46	5.5	0.7	3.04	6.9	0.8	3.7
200	1.2	1.2	4.0	4.9	0.6	3.02	6.2	0.8	3.81	7.7	0.9	4.59
225	1.4	1.4	4.5	5.5	0.7	3.82	6.9	0.8	4.74	8.6	1	5.77
250	1.5	1.5	5.0	6.2	0.8	4.79	7.7	0.9	5.88	9.6	1.1	7.16
280	1.7	1.7	9.8	6.9	0.8	5.94	8.6	1	7.35	10.7	1.2	8.94
315	1.9	1.9	11.1	7.7	0.9	7.46	9.7	1.1	9.32	12.1	1.4	11.37
355	2.2	2.2	12.5	8.7	1	9.49	10.9	1.2	11.78	13.6	1.5	14.4
400	2.4	2.4	14.0	9.8	1.1	12.03	12.3	1.4	15.01	15.3	1.7	18.26
450	2.7	2.7	15.6	11.0	1.2	15.17	13.8	1.5	18.9	17.2	1.9	23.09
500	3.0	3.0	17.5	12.3	1.4	18.89	15.3	1.7	23.31	19.1	2.1	28.49
560	3.4	3.4	19.6	13.7	1.5	23.52	17.2	1.9	29.34	21.4	2.3	35.75
630	3.8	3.8	22.1	15.4	1.7	29.75	19.3	2.1	37.01	24.1	2.6	45.29

Corrugated Pipe

Usage Areas

- Used with adapters suitable for the diameter of the pipe in concrete manhole and chimney applications.
- Applicable in sewage and wastewater disposal lines.
- Used in the lines for the disposal of urban and domestic wastewater.
- Ideal for rain and snow water transport and discharge lines.
- Suitable for drainage and soil water transport lines.
- Used in industrial and commercial wastewater transportation systems.
- Applicable in gravity liquid transport systems that do not require pressure.
- Used in energy and communication cable protection systems.
- Ideal for chemical and biological waste handling systems.

Corrugated Pipe

Product Features

- Corrugated pipes and fittings are made of High-Density Polyethylene (HDPE) according to the EN 13476-3 standard.
- Can be produced with or without a socket based on customer requests.
- Designed for various applications and joining methods, eliminating the need for welding machines when using the sealed fit method.
- Sewer pipes are designed in accordance with the ATV A 127 standard.
- High resistance to soil and traffic loads is ensured due to a specially designed trapezoidal structure and the flexibility provided by HDPE material.
- Non-carcinogenic properties.
- Reliable operation in temperatures ranging from -50°C to +60°C with minimal maintenance requirements.
- Simple maintenance, as pipes can be cut to size with tools like saws or jigsaws, and damaged sections can be repaired using a sliding sleeve.
- No waste generated during installation processes.
- Effective resistance to wear and chemical damage.
- High fluid performance and prevention of residue accumulation due to a smooth inner surface, ensuring uninterrupted operation.
- A lifespan under external loads of at least 50 years.
- Significant cost advantages in storage, transportation, and space usage are achieved by stacking from large to small diameters.

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Corrugated Pipe

Product Quality and Performance Test Results for HDPE 100 Corrugated Pipes		
Feature	**Requested**	**Standard Test Method**
Density Determination	Min 0,930(g/cm³)	TS EN ISO 1183-1
Mass Melt Flow Rate Determination	0.2 - 1.6 (g/10 min)	TS EN ISO 1183-1
Ring Stiffness	SN2, SN4, SN8, SN16	TS EN ISO 9969
Ring Flexibility Test	no damage	TS EN ISO 13968
Oven test	The pipe shall show no delamination cracks or bubbles	TS ISO 12091
Impact Resistance	TIR ≤ %10	EN ISO 3127

Nominal Diameter for HDPE 100 Corrugated Pipe		
DN	**ID Min**	**Socket Min**
100	95	32
160	150	38
200	195	54
300	394	64
400	392	74
500	490	85
600	588	96
800	785	118
1000	995	140

MONE

Geotextile Covered Drainage Pipe

Usage Areas

- Removal of harmful water from agricultural lands.
- Protection of buildings and structures from water-related damage.
- Discharge of groundwater formed on construction sites.
- Infrastructure support for grass field floors.
- Reclamation of lands with muddy or contaminated soil.
- Drainage of highway shoulders.
- Use in mining operation

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Geotextile Covered Drainage Pipe

Product Features

- Has an underground lifespan of 50 years.
- Practical for transportation and installation.
- Resistant to heavy chemicals.
- Easy to apply.
- Lightweight, making transportation, installation, and storage simple and efficient.
- Long-lasting.
- Can be used on sandy ground without the need for filter material.
- Strong due to the use of high-density polyethylene in its raw material.
- No risk of loss.
- Does not clog.

MONE

Steel Reinforced Corrugated Pipe

Steel Reinforced Spiral Corrugated Pipes combine steel and polyethylene for enhanced durability. Ranging from 800 mm to 2000 mm in diameter with ring stiffness values from SN 4 to SN 16, these pipes are ideal for Hydroelectric Power Plant (HEPP) projects. They offer a smooth inner surface, impact resistance, and high durability against traffic and soil loads, making them resistant to impact, load, and ground movements.

Usage Areas

- Water transmission lines in Hydroelectric Power Plant (HEPP) projects
- Infrastructure applications
- Irrigation systems
- Sewer lines
- Rainwater drainage
- Industrial applications
- Drainage systems
- Treatment systems

Steel Reinforced Corrugated Pipe

Steel Reinforced Spiral Corrugated Pipe Specifications						
Nominal Diameter (mm)	Inner Diameter (mm)	Ring Stiffness (kN/m²)				
DN	ID	SN 4	SN 8	SN 10	SN 12.5	SN 16
800	800	+	+	+	+	+
1000	1000	+	+	+	+	+
1200	1200	+	+	+	+	+
1400	1400	+	+	+	+	+
1500	1500	+	+	+	+	+
1600	1600	+	+	+	+	-
1800	1800	+	+	+	+	-
2000	2000	+	+	+	+	-

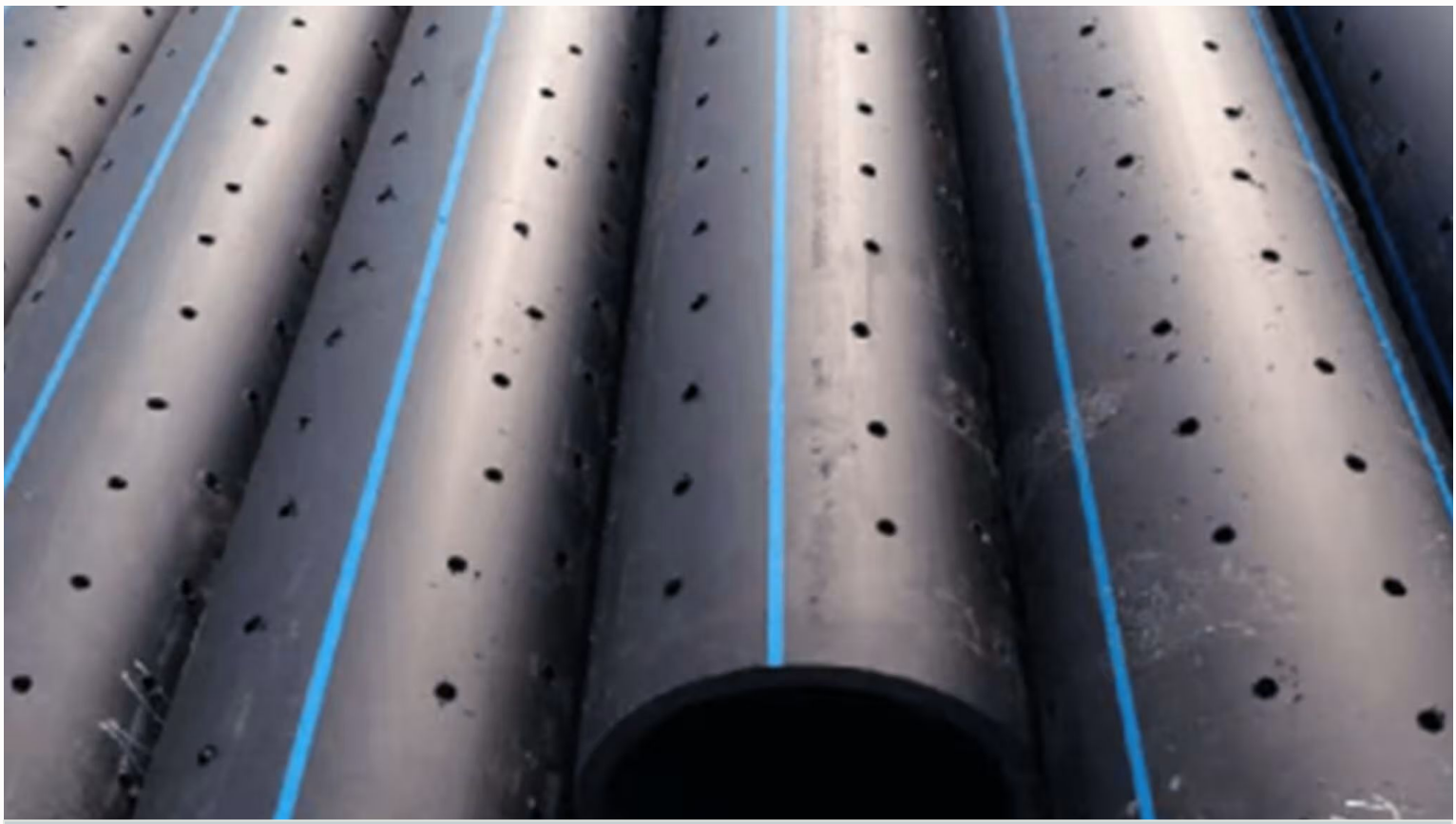
Product Features

- Provides full protection against corrosion and chemicals with its inner and outer polyethylene coating.
- Achieves the desired ring stiffness (SN value) due to the use of 100% HDPE.
- Demonstrates high strength and durability with the incorporation of steel ribs.
- Simplifies installation, allowing easy connection with electrofusion tape welding for any diameter.

MONE

Perforated Pipe

Perforated pipes are classified into three types: PE100 Perforated Pipe, Corrugated Perforated Pipe, PVC Perforated Pipe. These drainage pipes are designed for various applications, with customized specifications including drainage calculations, hole diameter, number of holes, pipe diameter, and wall thickness to determine the most suitable product for specific needs.



Usage Areas

- Collection of garbage water in solid waste facilities.
- Collecting excessive groundwater in agricultural areas.
- Improving swamp and loam lands.
- Collecting and draining water from buildings with deep foundations and foundations.
- Infrastructure for grass sports complexes.
- Shoulder drainage of highways.

MONE

Perforated Pipe

PE AND PVC Perforated Pipe Size Chart			
Nominal Diameter (mm)	Type B Min. Slot Width (mm)	Type A Min. Slot Width (mm)	Min. Slot Range (mm)
40	4	4	Bespoke Construction Solutions
50	4	4	
63	4	4	
75	4	4	
90	4	4	
110	5	4	
125	6	4	
140	6	4	
160	7	5	
180	8	5	
200	9	6	
225	10	6	
250	11	7	
280	13	8	
315	14	9	
355	14	10	
400	14	10	
450	14	10	
500	14	10	
560	14	10	
630	14	10	
710	14	10	
1000	14	10	

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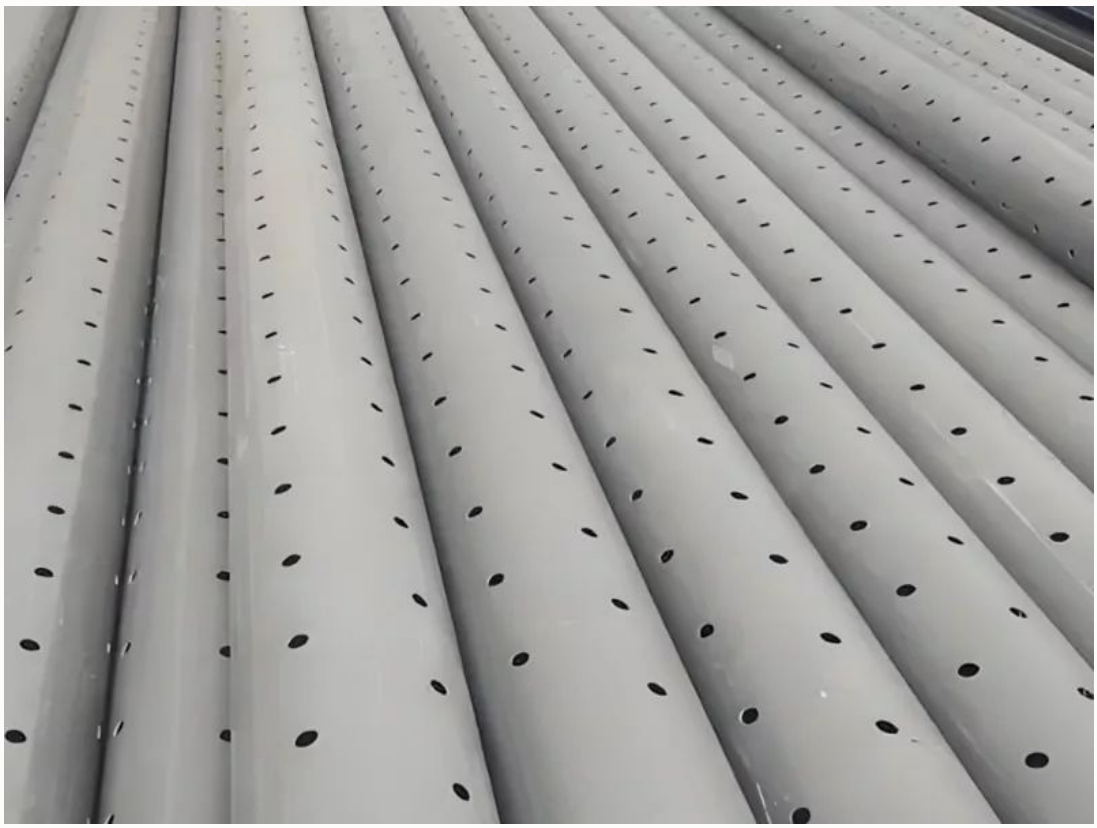
Perforated Pipe



Ductile Iron Pipe

Ground movements are a primary cause of issues in potable water networks, requiring pipes and fittings to be flexible, impact-resistant, and durable. Transmission and distribution lines are significant investments, demanding consideration of lifecycle costs, durability, and minimal maintenance. Ductile iron offers an ideal solution, combining cast iron's corrosion resistance and wear strength with superior tensile strength, flexibility, and impact resistance, making it well-suited for pipes and infrastructure.

MONE

Ductile Iron Pipe

Product Features

- High tensile strength provides resistance to loads, pressure, and vacuum.
- Excellent corrosion resistance.
- Does not require cathodic protection.
- Lower operating costs compared to polyethylene pipes of equivalent nominal diameter due to the nominal diameter representing the outer diameter.
- Flexibility without deformation and impact resistance make it ideal for seismic areas.
- Lifespan exceeding 100 years.
- Maintains water quality with an inner lining safe for human health.

MONE

PVC Pipe

PVC, or Polyvinyl Chloride, is a versatile plastic polymer widely used across various applications. It offers superior mechanical properties, including high tensile strength and modulus of elasticity, compared to other plastics. With a polymer chain formed by single carbon-carbon bonds, PVC exhibits exceptional chemical resistance. Additionally, its composition, containing over 50% chlorine, makes it inherently fire-resistant while maintaining robust mechanical performance.

MONE

PVC Pipe

Product Features

- Hygienic and safe for drinking water applications.
- Service life of up to 100 years.
- Lightweight, making it easy to transport and apply.
- Resistant to bacteria, insects, and rodents.
- Fire-retardant with excellent non-flammable chemical resistance.
- Provides insulation for heat, sound, and electricity.
- High impact resistance and mechanical tensile strength.
- Processes with lower energy consumption compared to other plastics.
- Versatile usage and excellent chemical and corrosion resistance.
- Suitable for contact with food without affecting drinking water quality.
- Prevents microbial growth and ensures low friction loss due to smooth surfaces.
- U-PVC production uses less oil and energy compared to other plastics.
- Eco-friendly material with reduced processing time and energy requirements.

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PVC Pipes Dimensions and Tolerances

Tolerancess (+)* Tolerances C=2.5			SDR 41 (S) 20			SDR 33 PN 6 (S) 16			SDR 26 PN 8 (S) 12,5			SDR 21 PN 10 (S) 10			SDR 17 PN 12,5 (S) 8			SDR 13,6 PN 16 (S) 6,3			SDR 11 PN 20 (S) 5		
DN mm	Dış Çap A*	Ovality O	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m	S mm	S*	m kg/m
12	0.2	0.5																			1.5	0.4	0.059
16	0.2	0.5																			1.5	0.4	0.078
20	0.2	0.5																1.5	0.4	0.098	1.9	0.4	0.124
25	0.2	0.5													1.5	0.4	122	1.9	0.4	0.155	2.3	0.5	0.187
32	0.2	0.5							1.5	0.4	0.16	1.6	0.4	0.167	1.9	0.4	198	2.4	0.5	0.25	2.9	0.5	0.302
40	0.2	0.5				1.5	0.4	0.196	1.6	0.4	0.21	1.9	0.4	0.248	2.4	0.5	313	3	0.1	0.391	3.7	0.6	0.482
50	0.2	0.6				1.6	0.4	0.261	2	0.5	0.33	2.4	0.5	0.391	3	0.1	489	3.7	0.6	0.603	4.6	0.7	0.75
63	0.3	0.8				2	0.5	0.411	2.5	0.5	0.51	3	0.6	0.616	3.8	0.6	780	4.7	0.7	0.965	5.8	0.8	1.191
75	0.3	0.9				2.3	0,5	0.562	2.9	0.5	0.71	3.6	0.6	0.88	4.5	0.7	1100	5.6	0.8	1.369	6.8	0.9	1.662
90	0.3	1.1				2.8	0,5	0.821	3.5	0.6	1.03	4.3	0.7	1.261	5.4	0.8	1584	6.7	0.9	1.965	8.2	1.1	2.405
C=2.0			PN 6			PN 8			PN 10			PN 12.5			PN 16			PN 20			PN 25		
110	0.4	1.4	2.7	0.5	1	3.4	0.6	1.219	4.2	0.7	1.51	5.3	0.8	1.9	6.6	0.9	2366	8.1	1.1	2.904	10,0	1.3	3.585
125	0.4	1.5	3.1	0.6	1	3.9	0.6	1.589	4.8	0.7	1.96	6	0.9	2.444	7.4	1	3015	0	0	0	11.4	1.4	4.645
140	0.5	1.7	3.5	0.6	1.597	4.3	0.7	1.962	5.4	0.8	2.46	6.7	0.9	3.057	8.3	1.1	3787	9.2	1.2	4.198	12.7	1.5	5.795
160	0.5	2	4	0.7	2.086	4.9	0.7	2.555	6.2	0.9	3.23	7.7	1	4.015	9.5	1.2	4954	11.8	1.4	6.154	14	1.7	7.301
180	0.6	2.2	4.4	0.7	2.581	5.5	0.8	3.227	6.9	0.9	4.05	8.6	1.1	5.045	10.7	1.3	6277	13.3	1.6	7.803	14.6	1.7	8.565
200	0.6	2.4	4.9	0.7	3,194	6.2	0.9	4.042	7.7	1	5.02	9.6	1.2	6.258	11.9	1.4	7757	14.7	1.7	9.582	18.2	2.1	11.864
225	0.7	2.7	5.4	0.8	3,96	6.9	0.9	5.06	8.6	1.1	6.31	10.8	1.3	7.92	13.4	1.6	9827	16.6	1.9	12.174			
250	0.8	3	6.2	0.9	5.052	7.7	1	6.274	9.6	1.2	7.82	11.9	1.4	9.696	14.8	1.7	12059	18.4	2.1	14.993			
280	0.9	3.4	6.9	0.9	6.297	8.6	1.1	7.848	10.7	1.3	9.76	13.4	1.6	12.229	16.6	1.9	15149	20	2.3	18.252			
315	1	3.8	7.7	1	7.905	9.7	1.2	9.959	12.1	1.5	12.42	15	1.8	15.4	18.7	2.1	19199	23.2	2.6	23.819			
355	1.1	4.3	8.7	1.1	10.066	10.9	1.3	12.612	13.6	1.6	15.74	16.9	1.9	19.554	21.1	2.4	24414	26.1	2.9	30.199			
400	1.2	4.8	9.8	1.2	12.777	12.3	1.4	16.036	15.3	1.8	19.95	19.1	2.2	24.901	23.7	2.6	30898	29.4	3.2	38.33			
450	1.4	5.4	11	1.4	14.341	13.8	1.6	17.991	17.2	2	25.23	21.5	2.4	28.03	26.7	2.9	34810	33.1	3.6	43.153			
500	1.5	6	12.3	1.5	18.040	15.3	1.8	22.44	19.3	2.2	31.45	23.9	2.6	35.054	29.7	3.2	43561	36.8	3.9	53.974			
560	1.7	6.8	13.7	1.6	22.326	17.2	2	28.03	21.8	2.4	39.79	26.7	2.9	43.512									
630	1.9	7.6	15.4	1.8	28.108	19.3	2.2	35.227	24.5	2.7	50.31	29.7	3.2	54.209									
710	2	8.6	17.1	2	35.113	21.4	2.4	43.942	27.6	3	63.87												
800	2	9.6	19.6	2.2	45.357	242.1	2.7	55.77	30.6	3.6	79.79												
900	2	-	22	2.5	57.364	27.2	3	70.923															
1000	2	-	24.5	2.7	71.868	30.6	3.3	89.762															

A* : Largest pipe outer diameter tolerance,mm (+ as)

SDR : Standard aspect ratio = Outer diameter / Wall thickness

S* : Wall thickness tolerance, mm (+ as)

DN : Outer Diameter

(S) : Shows pipe series.

S : Wall thickness

w : Kilogram unit of weight

* : Letters preceded by an ' * ' show tolerances.

PVC Pipe

MONE

PPRC Pipe

Produced from PPRC (Polypropylene Random Copolymer) raw material and in compliance with TS EN ISO 15874 standard, Mone Partners' PPRC pipes and fittings are ideal solutions for indoor cold and hot water systems. These products offer a smooth interior surface, hygienic structure, ease of installation, and cost-efficiency. Manufactured under strict quality control using fully automated machines, Mone Partners' PPRC pipes are compatible with TS 9937 and DIN 8077 standards. The Type-3 raw material, PP-R (Polypropylene Random Copolymer), provides superior chemical and physical properties, ensuring excellent durability for a wide range of applications.

PPRC Pipe

Product Features

- Resistant to chemicals, suitable for acidic and basic environments
- Does not rust or corrode
- Smooth inner surface that prevents particle adhesion and cross-sectional narrowing over time
- Flexible, unbreakable, and impact-resistant
- Prevents algae and bacterial growth
- Easy to apply, saving labor and time, and can be laid without wastage
- Non-reactive with building materials such as cement and lime in plaster applications, no insulation required
- Lightweight, offering convenience in transportation and storage
- Has a service life of 50 years

Product Quality and Performance Test Results for PPRC Pipe

Feature	Requirements	Experiment Parameter	Experiment Time	Standard Test Method
Dimensional Stability	≤ %2	135 °C	en ≤ 8 mm 1 hour 8 mm≤en≤16mm 2 hour en > 16 mm 4 hour	ISO 2505
Thermal Stability with Hydrostatic Pressure Test	No explosion should occur during the experiment	1,9 Mpa, 110 °C	8760 hour	ISO 1167-1 ISO 1167-2
Impact Resistance	≤ %10	0 °C	-	ISO 9854-1 ISO 9854-2
Melt Flow Rate (Raw Material)	≤0.5 g/min	2.16 Kg, 230 °C	-	ISO 1133-1
Melt Flow Rate (Pipe)	Compared to the raw material, the difference should be at most 30%	2.16 Kg, 230 °C	-	ISO 1133-1

MONE

PVC Wastewater Pipe

PVC wastewater pipes are designed to provide reliable and long-lasting solutions for both indoor and outdoor wastewater systems, offering resistance to chemical and environmental damage. Their smooth interior surfaces facilitate efficient fluid flow, while their durable construction ensures they withstand high temperatures and harsh conditions for extended periods.

Product Features

- Environmentally friendly and economical
- Long shelf life, ensuring safe discharge of wastewater without leakage
- Smooth surfaces designed to accelerate fluid flow
- Protective coating prevents external environmental damage
- Impact-resistant, ideal for both interior and exterior applications
- Durable and hard structure, resistant to damage, acids, and alkalis
- Maintains physical properties at high temperatures, offering extended service life
- Simple and safe joining methods for convenient installation
- Classified as a difficult-to-flame building material, preventing the spread of fire

MONE

GRP Pipe

GRP (Glass Reinforced Plastic) pipes are known for their high strength-to-weight ratio, offering excellent resistance to corrosion, making them ideal for use in harsh environments. These pipes are lightweight, durable, and require minimal maintenance, making them an efficient and cost-effective choice for various industrial, wastewater, and chemical applications.

Usage Areas

- Underground or above-ground drinking water, clean water lines, and distribution.
- Stormwater discharge lines.
- Pressurized and non-pressurized wastewater and sewer lines.
- Seawater discharge and seawater intake lines.
- Oil and chemical pipelines.
- Hydroelectric power plant filling and discharge lines.

MONE

Sea Dredging Pipe

Specifically designed for dredging operations in marine environments. They are highly durable, resistant to corrosion, and capable of withstanding harsh underwater conditions, making them ideal for transporting sediment and materials during dredging projects.

Product Features

- Made from high-quality HDPE raw materials
- UV additives for enhanced durability under sunlight exposure
- Resistant to harsh conditions and maximum wear
- Reliable and secure connections with connection equipment and flange adapters
- Suitable for both ship and water applications
- Certified welding teams for adapter connections
- Specially produced steel flanges with standardized connection holes for ease of use
- Black color for visibility and protection against sunlight damage
- Cost-effective without compromising on quality

MONE

Pipe Floaters

Pipe floaters are designed to provide buoyancy for plastic pipes during dredging or discharge operations. Manufactured with crack-resistant materials and filled with EPS foam, they ensure the pipes remain afloat and are protected from sinking. The floaters feature a corrosion-resistant bolt and nut system for secure and efficient coupling, allowing for easy installation and safe handling. Their robust construction ensures durability and reliability, even in challenging operational conditions.

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Pipe Floaters

Pipe Floating Clamp Dimensions					
Nominal Diameter (mm)	Inches	OD (mm)	ID (mm)	Length (mm)	Weight (kg)
250	10″	750	260	750	34
315	12″	850	325	1100	54
355	14″	850	365	1100	54
400	16″	850	410	100	54
450	18″	850	460	1100	54
500	20″	1175	515	1100	100
560	22″	1175	575	1100	100
630	24″	1300	650	1300	150
660	26″	1300	685	1300	150
700	28″	1550	715	1300	200
750	30″	1550	765	1300	200
800	32″	1700	820	1300	225

MONE

Pre-Insulated Pipe

Pre-insulated pipes consist of three key components: a carrier pipe, a casing pipe, and an insulating layer. The carrier pipe is made from steel, copper, or plastic, depending on the fluid being transported. The casing pipe is constructed from high-density polyethylene (HDPE), which is UV-resistant and waterproof. Between these pipes, a polyurethane insulation layer prevents heat loss, ensuring optimal thermal efficiency for heating, cooling, and industrial applications.

Usage Areas

- Geothermal district heating and cooling projects
- Fire lines
- Central heating systems
- Satellite cities and residential complexes
- Gallery or underground applications
- Industrial facilities
- Greenhouse applications
- Gas and oil pipelines
- Hotels and tourism facilities
- Military facilities
- Water pipelines
- Ship installations
- Various other applications

MONE

Pre-Insulated Pipe

Product Features

- Suitable for use in reinforced concrete channels and galleries.
- Pipes are buried directly in the trench without additional cost-increasing operations like reinforced concrete channels or galleries.
- Thermal expansion is managed with a prestressed laying technique that absorbs soil friction forces, reducing the need for compensators.
- Low heat loss with a polyurethane insulation material having a conduction coefficient of 0.028W/mk.
- Water-resistant insulation material, with a lifespan of at least 30 years.
- Corrosion resistance in the carrier pipe due to external factors.
- Insulation material life is 30 years, even at continuous service temperatures of 120°C.
- Only joint workmanship required during installation.
- Laying time is significantly shorter than classical systems.
- Special polyurethane used as insulation, offering excellent thermal efficiency.
- Seamless polyethylene casing pipe prevents leaks, resistant to rust and impacts.
- Leak detection systems available, capable of detecting leakage locations with ±1 to ±2 meters accuracy over a 10 km network using tracing wires.
- Homogeneous heat distribution ensured by uniform insulation thickness.
- Fittings are pre-insulated and ready for use in the field.
- Manufactured according to the EN253 standard.

MONE

Cable Casing Pipe

Mone cable casing pipes, also known as double wall cable protection pipes, are essential for communication and data transfer systems. Designed for durability and resistance to environmental conditions, they provide reliable cable protection. Manufactured according to the TS EN 61386-1 standard, these high-performance pipes ensure the safety and efficiency of telecommunication networks, offering long-term reliability.

Usage Areas

- Telecommunication lines
- Underground power lines
- Traffic light and signaling lines
- Railway signaling lines
- Industrial data and power lines

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Cable Casing Pipe

Product Features

- Flexible structure and special design resistant to underground movements and traffic loads.
- Maintains shape through elastic deformation against sudden loads, ensuring safe transmission.
- Resistant to chemicals.
- Average lifespan of 50 years.
- Easy transportation, application, and storage.

Cable Casing Pipe Dimensions

Outer Diameter (mm)	Inner Diameter (mm)	Package (m)
50	42	6/12 or 100 m
63	54	6/12 or 100 m
75	66	6/12 or 100 m
90	78	6/12 or 100 m
115	100	6, 7, 12, 13
160	150	6, 7, 12, 13
225	200	6, 7, 12, 13
275	250	6, 7, 12, 13
300	295	6, 7, 12, 13
400	395	6, 12

Cable Casing Pipe

Product Quality and Performance Test Results for Cable Casing Pipe (Rigid Type 450-750 Nm)			
Feature	**Value**	**Unit**	**Standard Test Method**
Melt Flow Rate (190 ° C / 5 kg)	0.15≤mfr≤0.40	g/10 min	TS EN ISO1133-1
Density 23 ° C	≥ 0.960	g/cm3	TS EN ISO 1183-1
Elongation at Break	> 500	%	TS EN ISO 527-1
Elongation Resistance	Min 24	MN/m2	TS EN ISO 527-1
ESCR (% 10 Igepal C-630) 2/10 error	> 48	hour	ASTM 1693
Impact Test	Max 3/12 cracking	mm	TS EN 61386-24
Ring Flexibility	-	No damage	TS EN ISO 9969
Strength (3,15 Kn/m2)	di*0.03	g/cm3	DIN 16961

MONE

Sprinkler Irrigation Pipe

Product Features

- Made from durable HDPE PE 100 material.
- Light and flexible structure for easy handling.
- Resistant to UV rays for long-term durability.
- Low coefficient of friction, ensuring abrasion resistance even in harsh weather conditions.
- Available in PN4, PN5, and PN6 pressure classes.
- Produced in 5 and 6-meter lengths with latches tailored to land characteristics.
- Provides 100% sealing for efficient irrigation.
- Enhances crop yield quality and efficiency compared to other irrigation methods.
- Portable for easy transportation and installation.

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Sprinkler Irrigation Pipe

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Gate Valve

A gate valve is a type of valve used to fully open or close the flow of fluid in a pipeline, utilizing a flat or wedge-shaped gate that moves perpendicular to the flow. It is suitable for non-corrosive liquids and fuels but is not designed for flow control or throttling.

Product Features

- Curtain-shaped closing mechanism: uses a flat or wedge-shaped gate moving perpendicular to the flow.
- Screw shaft operation: gate is controlled by a screw mechanism for up-and-down motion.
- Sealing: achieved using bushings or seats mounted on the body and the gate for tight shut-off.
- Fully open or close flow: designed for non-corrosive liquids and liquid fuel installations.
- Not for control or throttling: partial opening can cause vibration and damage.
- Material suitability: typically made from materials like cast iron or stainless steel.
- Minimal resistance: ensures smooth flow when fully open.

Above Ground Hydrant

Product Features

- Hydrants allow water intake with a hose in pressurized water networks, typically with two outlets (optional three).
- They include a shaft controlling the hydrant valve, a spring valve (check valve) for automatic discharge, hose connection fittings, and casting parts for the main body.
- Opening and closing are controlled using a hydrant key to turn the spindle; counterclockwise opens, and clockwise closes.
- The valve closes in the flow direction of water, ensuring tightness under pressure and enabling turbulence-free, linear flow.
- This design reduces pressure loss, prevents vibrations, extends hydrant life, and allows water to spray over longer distances.
- For drainage, hydrants must be closed to release water via the spring valve, preventing freezing in cold weather.

Underground Hydrant

Product Features

- Underground hydrants have water intake ports located underground with a cover above ground in pressurized water networks.
- They consist of a shaft controlling the valve, casting parts forming the main body, and a hose connection sleeve.
- Opening and closing are managed using a hydrant key to control the shaft.
- Used for fire brigade water supply in factories, warehouses, industrial facilities, building surroundings, fire-sensitive forests, and residential areas.

MONE

Manual Butterfly Valve

Product Features

- Valve body and flaps are designed to minimize resistance.
- Sealing is ensured by a T-section sealing ring fixed circumferentially on the flap edge with a pressure ring.
- Absolute sealing is provided in both directions by the sealing ring pressing on the conical body seat when closed.
- Sealing ring is replaceable without removing the valve.
- Seat surface is abrasion and corrosion-resistant, made with hard Chrome or AISI 316 stainless steel welding filler.
- Double eccentric design reduces pressure on the rubber sealing ring during opening and ensures continuous sealing contact.
- Second eccentric allows easy separation of the sealing ring from the body seat during opening.
- Double-piece shaft design increases the transition cross-section inside the valve.
- Shaft sealing uses O-rings on self-lubricating bronze and Delrin bushings, requiring no maintenance and extending valve life.
- Gearboxes enable manual quarter-turn (90°) operation and are lockable to prevent unintended rotation.
- Gearbox output flanges are compatible with electric actuators.
- Design complies with TS EN 593; connection lengths per TS EN 558-1; flange connections per EN 1092-2 and ISO 7005-2.

MONE

Suction Cup

Product Features

- Air accumulation at pump outlets and pipelines narrows the water transition area and reduces capacity.
- Double ball suction cups are used to prevent air accumulation and ensure high efficiency.
- When water enters the system, air is directed into the suction cup and discharged through holes in the inner side covers.
- The suction cup fills with water, lifting the balls to close the holes and ensure tightness.

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Mone Partners Engineering

Thanks.

Do you have any questions?

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