



RESINTECH PLASTICS (M) SDN. BHD.

High Density Polyethylene Pipe



FOR WATER SUPPLY

Complete Range of H.D.P.E Pipes
PE 80, PE 100, MDPE

**“CLEAN DRINKING WATER IS THE MOST ESSENTIAL
ELEMENT IN LIFE”**



At Resintech Plastics (Malaysia) S/B, we are determined to produce the best quality of HDPE and MDPE pipes. With the best machine and knowledgeable production capacity, we are capable of producing the best quality polyethylene pipes at the most competitive market. Our PE pipes quality is produced and certified according to the strict requirement of Malaysia Standard (MS1058) and International Standard Organization (ISO4427). To complete the whole piping system, Resintech is also determined to produce the best quality of fittings to enable jointing possible.

Our company is certified ISO 9000:2001 in manufacturing of polyethylene pipes in Malaysia. As an ISO certified company, we are determined to maintain and develop our customer services for all our customers. Resintech is positioning itself to be an excellent provider of polyethylene pipeline system. Beginning from designing, ordering, manufacturing, packaging, shipping to jobsite assistance, we are desire to provide the best technical support and service.

VARIOUS APPLICATION OF PE PIPES IN DIFFERENT INDUSTRIES

- 1) Municipal Water Distribution
- 2) Natural Gas Distribution System
- 3) Industrial Piping System
- 4) Marine and Dredging Application
- 5) Agricultural and Municipal Drainage System
- 6) Sewerage and Waste Water Application
- 7) Mining Application
- 8) Electrical and Telecommunication Conduit Pipes
- 9) Irrigation Application



ADVANTAGES OF CORRUGATED PE PIPES:

Flexibility and Lightweight

Polyethylene pipe is light and flexible. This makes the pipes easy to handle and fast installation. Indirectly, it saves money on installation cost. Certain diameters of pipes that can be produced in coils are very suitable for uneven terrain.

Cost Effective, Long Term and Permanent

Significant cost savings can be realized using polyethylene pipe over traditional materials such as steel, ductile iron, fibreglass or PVC within the same design parameters. Real savings in product costs, installation efficiency and long life expectancy are major advantages of polyethylene pipe.

Superior Flow Characteristics:

The exceptionally smooth inner surface of HDPE pipe offers minimal resistance to flow and the flow remains relatively constant for the life of the pipe, unlike other piping products that must allow for a reduction in flow capacity over time. When using HDPE pipe a higher maximum flow rate for given size can be expected compared to other types of piping materials.

Easy Installation

Polyethylene pipe can be joining by many methods. Either by butt fusion, saddle fusion, socket fusion or electro fusion, all of them offer the good and full leak proof joints.

Corrosion, Biological and Chemical Resistant

Polyethylene offers highly desirable properties that make it the preferred choice of pipeline material. The inherent properties of polyethylene make it extremely resistant to scale build up, that leads to decreased flow rates and is impervious to most aggressive chemicals and corrosive elements. An added benefit is that PE fittings are more chemically resistant than stainless steel.

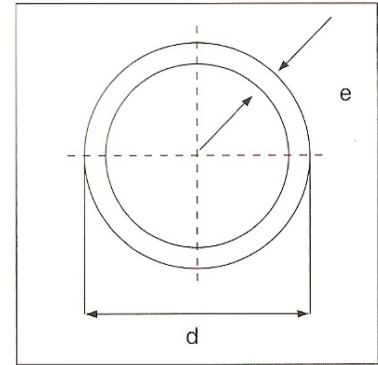
Density	0.941 - 0.965	g/cm ³
Melt Flow index	0.4 - 0.7	g/10 min
Coeffecient of friction	0.01 - 0.015	mm
Yield Stress	22 - 23	MPa
Elongation at yield	9	%
Elongation at break	>300	%
Tensile E-modus	800 - 900	MPa
Shore Hardness	60 - 65	
Notched Impact Strength	>20	
Vica Softening Point	>126	
Temperature Range	-20 to 60	Celsius

At Resintech, we produced our High Density PE 80 pipe according to the Malaysian Standard 1058. For the PE 100 pipes, we manufacture according to the ISO 4427 standard. All the pipes are manufactured according to the high requirement stated by the SIRIM. All our pipes are manufactured under a very strict and zero mistake requirement by our very own in house, quality control department. All our manufacturing process are strictly following the ISO standard that is governing our production system and procedure. We produced the highest quality of PE pipe to ensure customer satisfaction.



PE 80 PRESSURE PIPE

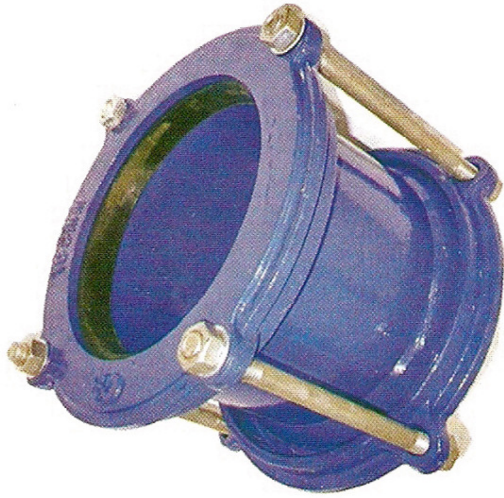
Material PE 80
Colour Black (with or without blue strip), Blue
Dimensions (according to) MS 1058
Standard length 50 or 100 Meter per coil;
 6 or 12 Meter per length



Pressure pipe SDR 9 SDR 11 SDR 13.6 SDR 17 SDR 21

PN (bar) at 20°C D (mm)	PN16		PN12.5		PN10		PN8		PN6	
	e mm	~kg/m	e mm	~kg/m	e mm	~kg/m	e mm	~kg/m	e mm	~kg/m
20	2.3	0.135								
25	2.8	0.20	2.3	0.17						
32	3.6	0.33	2.9	0.28	2.6	0.235				
40	4.5	0.51	3.7	0.43	3.0	0.31	2.4	0.22		
50	5.6	0.795	4.6	0.65	3.7	0.52	3.0	0.45	2.4	0.38
63	7.1	1.27	5.8	1.05	4.7	0.88	3.8	0.72	3.0	0.58
75	8.4	1.78	6.8	1.48	5.5	1.24	4.5	1.02	3.6	0.84
90	10.1	2.56	8.2	2.12	6.6	1.76	5.4	1.48	4.3	1.20
110	12.3	3.75	10.0	3.08	8.1	2.58	6.6	2.17	5.3	1.75
125	14.0	4.83	11.4	4.08	9.2	3.34	7.4	2.67	6.0	2.17
140	15.7	6.67	12.7	5.08	10.3	3.46	8.3	3.48	6.7	2.85
160	17.9	8.00	14.6	6.67	11.8	5.50	9.5	4.50	7.7	3.67
180	20.1	10.08	16.4	8.42	13.3	7.00	10.7	5.67	8.6	4.67
200	22.4	12.5	18.2	10.33	14.7	8.58	11.9	7.00	9.6	5.75
225	25.1	15.75	20.5	13.09	16.6	10.92	13.4	9.00	10.6	7.34
250	27.9	18.42	22.7	16.17	18.4	13.42	14.8	10.92	11.9	8.92
280	31.3	24.42	25.4	20.25	20.6	16.75	16.6	13.75	13.4	11.25
315	35.2	30.92	28.6	24.17	23.2	21.25	18.7	17.42	15.0	14.17
355	39.7	39.25	32.2	32.67	26.1	27.0	21.2	20.92	16.9	18.0
400	44.7	49.92	36.3	41.42	29.4	34.25	23.7	28.00	19.1	22.92
450	50.3	63.09	40.9	52.42	33.1	43.34	26.7	35.42	21.5	29.0
500	55.8	77.75	45.4	64.59	36.8	53.5	29.7	43.75	23.9	35.84
560			50.8	81.09	41.2	67.08	33.2	54.92	26.7	44.83
630			57.2	103.00	46.3	84.83	37.4	69.42	30.0	56.67
710					52.2	108.42	42.1	89.5	33.9	73.13
800					58.8	137.53	47.4	113.45	38.2	92.63
900							53.3	144.05	42.9	117.2
1000							59.3	177.70	47.7	144.85

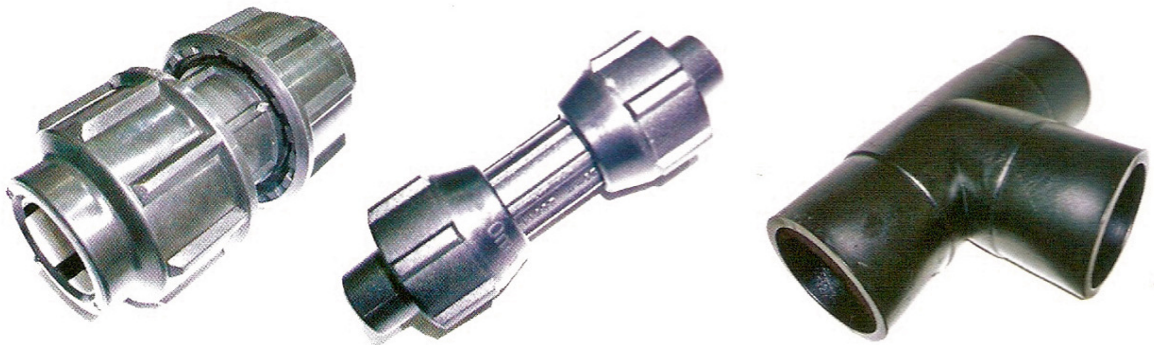
1. Mechanical Couplings



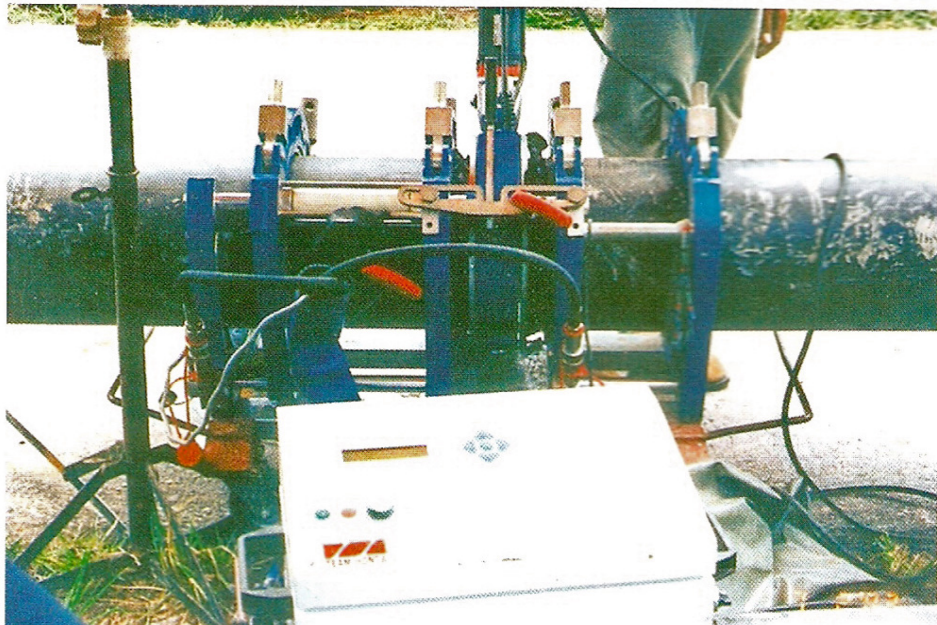
2. Electrofusion Couplings



3. Compression or Other Similar Fittings



4. Butt Fusion Jointing



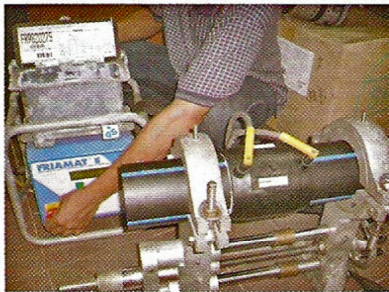
Electrofusion joint



1. Clean up the connection part. Marked the inserting depth on the pipe end. Scraped and polished the jointing surface. After polished, prevent the jointing surface from contaminating especially touching grease and dirt.



2. Insert the electrofusion into both pipe ends. During installation, all the connection must be in straight line and prevent any movement to the pipes or coupler. Some form of clamps are recommended in the process.

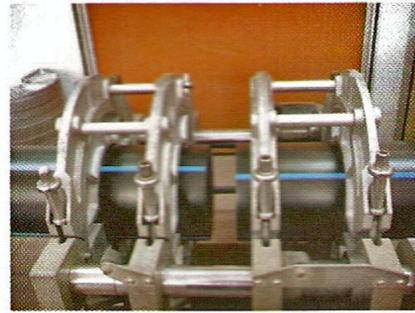


3. Connect the control units leads to the terminals on the fittings. Switch on the control unit. Some automatic units will have sensor which can acknowledge the coupler and do the welding automatically. If not, manual machine will have to be done by turning a few button. Please refers to the control unit supplier for proper guide on this step.

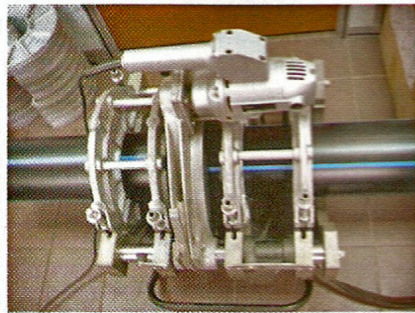


4. Cooling will be needed once the jointing is

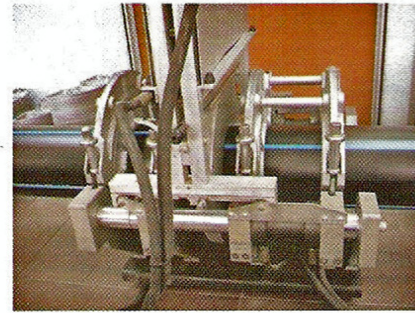
Butt Fusion welding of HDPE Pipe



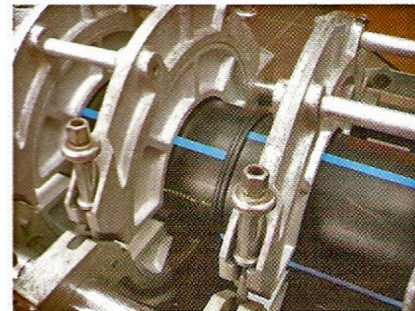
1. Clamp both the pipe to be joined using the jig. Normally, the jig comes with the butt welding machine. Please allocate more than 30mm of each pipe to work with.



2. Trimmer is install in between the two pipes end. Both the pipes end are pressed against the trimmer. Trimmer's blade will start cutting. Purpose is to get even surface for both pipe end to be joined.



3. Put the heating panel in between the pipe ends.



4. Then heater panel is quickly removed and both pipe ends are pressed together swiftly. Increase pressure to the heated joints and keep the pressure until it cools down.