



PE Water Pipe and Fittings



Visit our website: www.liansu.com

Company Profile

LIANSU Overview

Founded in 1986, LIANSU is one of the largest manufactures of plastic pipes, plastic fittings, and plastic extrusion machinery in China. Since our inception, we have built a reputation of providing high quality products and superior customer service with advanced technology and constant innovations. Today, LIANSU has 11 manufacturing bases across China, with more than 300 plastic extrusion lines and 600 injection molding machines. The annual production capacity has exceeded 400,000 tons. We have more than 15 years experience in export. The service network covers over 50 countries all over the world. A full variety of products and large-scale facilities will provide you with one-stop purchasing experience and ensure on-time delivery.

Quality Assurance

- LIANSU has passed the certification of ISO9001 Quality Management System, ISO14001 Environment Management System and OHSAS18001 Occupational Health and Safety Management System.
- Some products have passed the certification of NSF, CSA, and SAI.
- LIANSU plastic pipes and fittings were awarded China Top Brand.
- LIANSU plastic pipes and fittings were entitled National Inspection-free Products.
- L&S brand was recognized as a China Famous Brand.
- LIANSU Inspection Center has gained the Accreditation Certificate of China National Accreditation Board for Laboratories (CNAL).

Advanced Technology

We have an international research and development center with excellent experts and advanced equipments, providing a good experimental platform to develop new products. We also have advanced extrusion and injection machinery in workshop, providing the high quality products. We will constantly research and develop the latest technology to keep the leading position in plastic industry.

Superior Customer Service

LIANSU attaches great importance to pre-sale service, insale service, and after-sale service, providing the flexible and best solution to satisfy the various needs of our customers. We will continue valuing our customers with utmost priority and improving customer service with innovation.





Contents

PE Water Pipe	01
• PE 80 Pipe	02
• PE 100 Pipe	03
PE Water Pipe Fittings	
• Socket Joint Fittings	04
• Butt Joint Fittings	11
• Electro Fusion Fittings	16
• Fabricated Fittings	19
Tools	23
Installations	
• Socket Fusion Joint	24
• Butt Fusion Joint	25
• Electro Fusion Joint	26
• Transition Joint	27
Test Reports	28

Product Overview

- ◎ **Material:** PE 80 or PE 100
- ◎ **Pressure Rating:** 0.4MPa, 0.6MPa, 0.8MPa, 1.0MPa, 1.25MPa, 1.6MPa
- ◎ **Size:** full 20mm through 1600mm availability
- ◎ **Standard:** ISO4427: 1996 and BS 6920
- ◎ **Colors:**
 - Blue: all size
 - Black with blue stripes: d_n110 or above
 - Other colors are also available upon request
- ◎ **Form Supplied:**
 - 5.5 meters straight length (all size)
 - 50 or 100 meters coil length (d_n20~d_n63)
 - Other forms are also available upon request



Advantages

- ◎ **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium
- ◎ **Corrosion Resistant:** resist chemical matters and electron chemical corrosion
- ◎ **Low Flow Resistance:** smooth interior walls and low friction
- ◎ **Excellent Flexibility:** can be supplied in coil
- ◎ **Easy Installation:** light weight and handed friendly
- ◎ **Longevity:** more than 50 years under proper use
- ◎ **Various Joint Availability:** socket fusion joint, butt fusion joint, electro fusion joint and transition joint
- ◎ **Recycled and Environment-friendly**

Applications

- ◎ Municipal water supply
- ◎ Commercial & Residential water supply
- ◎ Industrial liquids transportation
- ◎ Sewage treatment



Properties

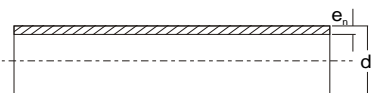
Properties		Typical Value
Specific Gravity, g/cm ³ (20℃)		0.941~0.965
Longitudinal Reversion, % (110℃)		≤3
Oxidation Induction Time, min (200℃)		≥20
Extension Rate at Break, %		≥350
Hydraulic Pressure Test	20℃, 100h, Hoop Stress is 12.4MPa	No Failure
	80℃, 165h, Hoop Stress is 5.5MPa	No Failure
	80℃, 1000h, Hoop Stress is 5.0MPa	No Failure

PE Water Pipe: PE 80 Pipe

SDR 33 (PN 0.4)			SDR 21 (PN 0.6)			SDR 17 (PN 0.8)		
Part Number	d _n (mm)	e _n (mm)	Part Number	d _n (mm)	e _n (mm)	Part Number	d _n (mm)	e _n (mm)
11113	160	4.9	11309	90	4.3	11408	75	4.5
11114	180	5.5	11310	110	5.3	11409	90	5.4
11115	200	6.2	11311	125	6.0	11410	110	6.6
11116	225	6.9	11313	160	7.7	11411	125	7.4
11117	250	7.7	11314	180	8.6	11413	160	9.5
11118	280	8.6	11315	200	9.6	11414	180	10.7
11119	315	9.7	11316	225	10.8	11415	200	11.9
11120	355	10.9	11317	250	11.9	11416	225	13.4
11121	400	12.5	11318	280	13.4	11417	250	14.8
11122	450	13.8	11319	315	15.0	11418	280	16.6
11123	500	15.3	11320	355	16.9	11419	315	18.7
11124	560	17.2	11321	400	19.1	11420	355	21.1
11125	630	19.3	11322	450	21.5	11421	400	23.7
11126	710	21.8	11323	500	23.9	11422	450	26.7
11127	800	24.5	11324	560	26.7	11423	500	29.7
			11325	630	30.0	11424	560	33.2
			11326	710	33.9	11425	630	37.4
			11327	800	38.1	11426	710	42.1
						11427	800	47.4

SDR 13.6 (PN 1.0)			SDR 11 (PN 1.25)			Coil Pipe			
Part Number	d _n (mm)	e _n (mm)	Part Number	d _n (mm)	e _n (mm)	SDR 13.6 (PN 1.0)			
						Part Number	d _n (mm)	e _n (mm)	Length (m/roll)
11507	63	4.7	11603	25	2.3	12507	63	4.7	50
11508	75	5.6	11604	32	3.0				
11509	90	6.7	11605	40	3.7				
11510	110	8.1	11606	50	4.6				
11511	125	9.2	11607	63	5.8				
11513	160	11.8	11608	75	6.8				
11514	180	13.3	11609	90	8.2				
11515	200	14.7	11610	110	10.0				
11516	225	16.6	11611	125	11.4	12603	25	2.3	50/100
11517	250	18.4	11613	160	14.6	12604	32	3.0	50/100
11518	280	20.6	11614	180	16.4	12605	40	3.7	50/100
11519	315	23.2	11615	200	18.2	12606	50	4.6	50
11520	355	26.1	11616	225	20.5	12607	63	5.8	50
11521	400	29.4	11617	250	22.7				
11522	450	33.1	11618	280	25.4				
11523	500	36.8	11619	315	28.6				
11524	560	41.2	11620	355	32.2				
11525	630	46.3	11621	400	36.3				
11526	710	52.2	11622	450	40.9				
11527	800	58.8	11623	500	45.4				
			11624	560	50.8				
			11625	630	57.2				

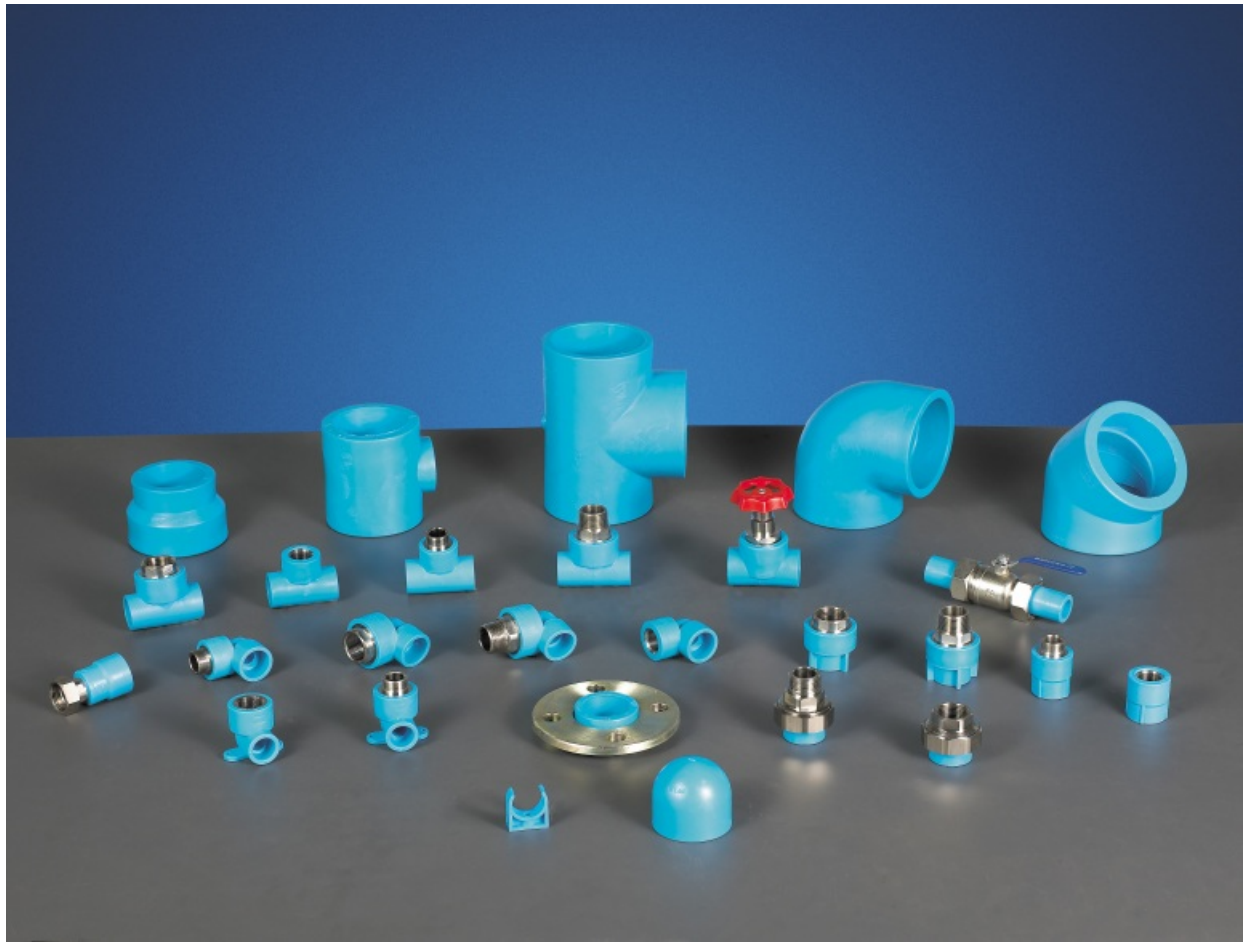
SDR: Standard Dimension Rate
PN: Nominal Pressure (unit: MPa)
d_n: Nominal Outside Diameter
e_n: Nominal Wall Thickness



PE Water Pipe: PE 100 Pipe

SDR 26 (PN 0.6)			SDR 21 (PN 0.8)			SDR 17 (PN1.0)		
Part Number	d _n (mm)	e _n (mm)	Part Number	d _n (mm)	e _n (mm)	Part Number	d _n (mm)	e _n (mm)
13210	110	4.2	13309	90	4.3	13408	75	4.5
13211	125	4.8	13310	110	5.3	13409	90	5.4
13213	160	6.2	13311	125	6.0	13410	110	6.6
13214	180	6.9	13313	160	7.7	13411	125	7.4
13215	200	7.7	13314	180	8.6	13413	160	9.5
13216	225	8.6	13315	200	9.6	13414	180	10.7
13217	250	9.6	13316	225	10.8	13415	200	11.9
13218	280	10.7	13317	250	11.9	13416	225	13.4
13219	315	12.1	13318	280	13.4	13417	250	14.8
13220	355	13.6	13319	315	15.0	13418	280	16.6
13221	400	15.3	13320	355	16.9	13419	315	18.7
13222	450	17.2	13321	400	19.1	13420	355	21.1
13223	500	19.1	13322	450	21.5	13421	400	23.7
13224	560	21.4	13323	500	23.9	13422	450	26.7
13225	630	24.1	13324	560	26.7	13423	500	29.7
13226	710	27.2	13325	630	30.0	13424	560	33.2
13227	800	30.6	13326	710	33.9	13425	630	37.4
13228	900	34.4	13327	800	38.1	13426	710	42.1
13229	1000	38.2	13328	900	42.9	13427	800	47.4
13230	1200	46.3	13329	1000	47.7	13428	900	53.3
13231	1400	53.9	13330	1200	57.2	13429	1000	59.3
13232	1600	61.6	13331	1400	66.8			

SDR 13.6 (PN 1.25)			SDR 11 (PN 1.6)			Coil Pipe			
Part Number	d _n (mm)	e _n (mm)	Part Number	d _n (mm)	e _n (mm)	SDR 13.6 (PN 1.25)			
						Part Number	d _n (mm)	e _n (mm)	Length (m/roll)
13507	63	4.7	13602	20	2.3	14507	63	4.7	50
13508	75	5.6	13603	25	2.3				
13509	90	6.7	13604	32	3.0				
13510	110	8.1	13605	40	3.7				
13511	125	9.2	13606	50	4.6				
13513	160	11.8	13607	63	5.8				
13514	180	13.3	13608	75	6.8				
13515	200	14.7	13609	90	8.2				
13516	225	16.6	13610	110	10.0				
13517	250	18.4	13611	125	11.4				
13518	280	20.6	13613	160	14.6				
13519	315	23.2	13614	180	16.4				
13520	355	26.1	13615	200	18.2				
13521	400	29.4	13616	225	20.5				
13522	450	33.1	13617	250	22.7				
13523	500	36.8	13618	280	25.4				
13525	630	46.3	13619	315	28.6				
			13620	355	32.2				
			13621	400	36.3				
			13622	450	40.9				
			13623	500	45.4				
			13624	560	50.8				
			13625	630	57.2				



Features

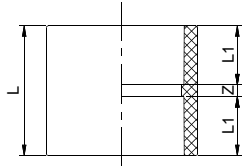
- **Material:** PE 100
- **Size:** full 20mm through 110mm availability
- **Pressure Rating:** 1.6MPa, or other nominal pressures available upon request
- **Standard:** EN 12201-3:2003, AS/NZS 4129:2000
- **Color:** blue (all size)
black (d_n110)
other colors are also available upon request
- **Joint:** joining pipe and socket joint fittings by socket fusion joint

Advantages

- **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium
- **Corrosion Resistance:** resist chemical matters and electron chemical corrosion
- **Low Installation Costs:** light weight and ease of installation can reduce installation costs
- **High Flow Capacity:** smooth interior walls result in low pressure loss and high volume
- **Longevity:** more than 50 years under proper use

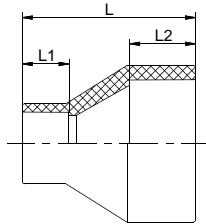
PE Water Pipe Fittings: Socket Joint Fittings

Coupling (Soc × Soc)



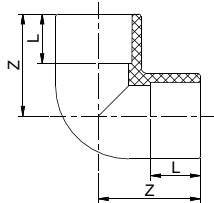
Part Number	Size (mm)	L1	L	Z	Qty/Ctn
1010002	20	16.5	37	4	810
1010003	25	18	40	4	600
1010004	32	20.5	45	4	460
1010005	40	22.5	50	5	240
1010006	50	25.5	56	5	260
1010007	63	29.5	65	6	160
1010008	75	33	72	6	100
1010009	90	36	78	6	50
1010010	110	42	90	6	36

Reducer (Soc × Soc)



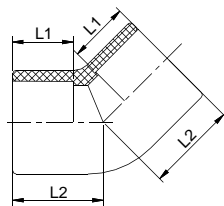
Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1010095	25x20	16.5	18	45	600
1010126	32x20	16.5	20.5	56	320
1010127	32x25	18	20.5	52	300
1010157	40x20	16.5	22.5	63	320
1010158	40x25	18	22.5	61	240
1010159	40x32	20.5	22.5	54	240
1010188	50x20	16.5	25.5	68	160
1010189	50x25	18	25.5	67	160
1010190	50x32	20.5	25.5	67	160
1010191	50x40	22.5	25.5	62	120
1010220	63x25	18	29.5	82	160
1010221	63x32	20.5	29.5	84	150
1010222	63x40	22.5	29.5	82	150
1010223	63x50	25.5	29.5	71	135
1010255	75x63	29.5	33	80	90
1010286	90x63	29.5	38.5	100	72
1010287	90x75				55
1010317	110x63	29.5	41.5	112	50

90° Elbow (Soc × Soc)



Part Number	Size (mm)	L	Z	Qty/Ctn
1020002	20	16.5	33	500
1020003	25	18	37	240
1020004	32	20.5	43	200
1020005	40	22.5	48	100
1020006	50	25.5	61	120
1020007	63	29.5	69	60
1020008	75	33	77.5	40
1020009	90	36	89	25
1020010	110	42	107	15

45° Elbow (Soc × Soc)

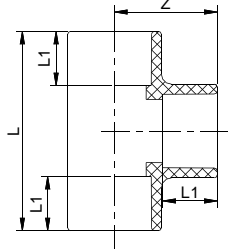


Part Number	Size (mm)	L1	L2	Qty/Ctn
1030002	20	16.5	24	500
1030003	25	18	27	360
1030004	32	20.5	32	210
1030005	40	22.5	35	140
1030006	50	25.5	41	140
1030007	63	29.5	48	80
1030008	75	31	49	50
1030009	90	35.5	57.5	30
1030010	110	41.5	67.5	20

PE Water Pipe Fittings: Socket Joint Fittings

Tee

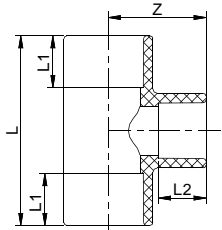
(Soc × Soc × Soc)



Part Number	Size (mm)	L1	L	Z	Qty/Ctn
1040002	20	16.5	64	32	320
1040003	25	18	72	36	260
1040004	32	20	86	43	140
1040005	40	22.5	96	48	90
1040006	50	22.5	114	57	80
1040007	63	29.5	142	71	50
1040008	75	33	155	77.5	30
1040009	90	36	178	89	20
1040010	110	42	214	107	12

Reducing Tee

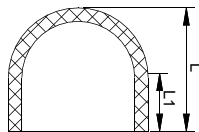
(Soc × Soc × Soc)



Part Number	Size (mm)	L1	L2	L	Z	Qty/Ctn
1040095	25x20	18	16.5	66	34	280
1040126	32x20	20.5	16.5	72	38	160
1040127	32x25	20.5	18	77	40	120
1040157	40x20	22.5	16.5	78	42	116
1040158	40x25	22.5	18	83	44	96
1040159	40x32	22.5	20.5	90	46	96
1040188	50x20	25.5	16.5	86	47	160
1040189	50x25	25.5	18	91	49	150
1040190	50x32	25.5	20.5	98	51	120
1040191	50x40	25.5	22.5	104	53	100
1040220	63x25	29.5	18	101	55	80
1040221	63x32	29.5	20.5	108	57	60
1040222	63x40	29.5	22.5	112	59	60
1040223	63x50	29.5	25.5	122	62	60
1040255	75x63	33	29.5	145	75	36
1040285	90x50					
1040286	90x63	36	29.5	151	84	28
1040287	90x75	36	33	164	88	25

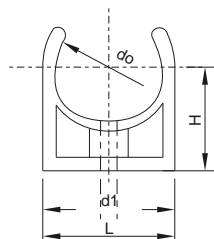
Cap

(Soc)



Part Number	Size (mm)	L1	L	Qty/Ctn
1050002	20	16.5	30	1500
1050003	25	18	34	900
1050004	32	20.5	44	450
1050005	40	22.5	55	240
1050006	50	25.5	59	140
1050007	63	29.5	70	150

Pipe Clamp

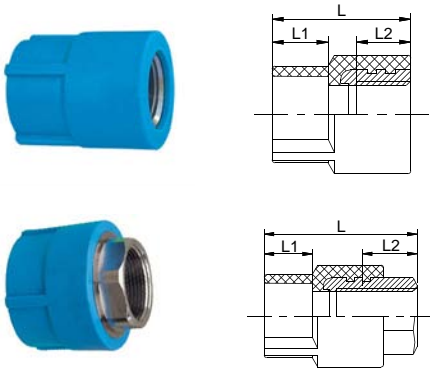


Part Number	Size (mm)	D	L	do	d1	H	Qty/Ctn
1060002	20	20	27.5	20.5	5	22	1080
1060003	25	25	32.5	25.5	5	25	1050
1060004	32	32	39	32.5	5	29	960

PE Water Pipe Fittings: Socket Joint Fittings

Female Thread Adapter

(Soc × Fipt with Metal Insert)



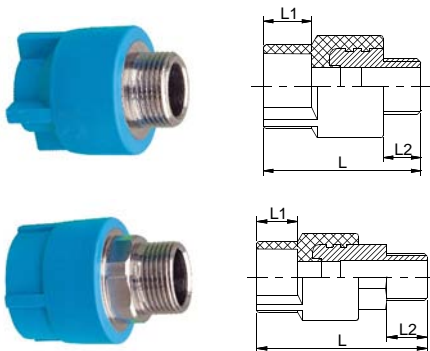
I

II

Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1070002	20x1/2"	16.5	17.5	42	360
1070065	20x3/4"	16.5	17.5	42	240
1070095	25x1/2"	18	17.5	44.5	300
1070003	25x3/4"	18	17.5	45	180
1070126	32x1/2"	20.5	17.5	47	180
1070127	32x3/4"	20.5	17.5	47	210
1070004	32x1"	20.5	23	59	128
1070159	40x1"	22.5	23	60	120
1070005	40x1 1/4"	22.5	23	64	64
1070191	50x1 1/4"	25.5	23	66	64
1070006	50x1 1/2"	25.5	23	68.5	48
1070007	63x2"	29.5	75	77	44
1070255	75x2"				

Male Thread Adapter

(Soc × Mipt with Metal Insert)



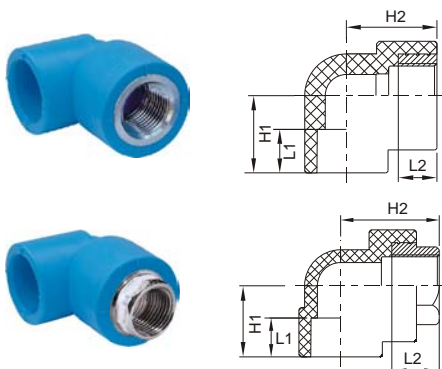
I

II

Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1080002	20x1/2"	16.5	14	56	240
1080065	20x3/4"	16.5	14	56	180
1080095	25x1/2"	18	14	58.5	245
1080003	25x3/4"	18	14	59	180
1080126	32x1/2"	20.5	14	61	180
1080127	32x3/4"	20.5	14	61	180
1080004	32x1"	20.5	19	78	96
1080159	40x1"	22.5	19	79	96
1080005	40x1 1/4"	22.5	21	85	64
1080191	50x1 1/4"	25.5	21	87	64
1080006	50x1 1/2"	25.5	21	89.5	64
1080007	63x2"	29.5	24	102	40
1080255	75x2"				

Female Thread Elbow

(Soc × Fipt with Metal Insert)



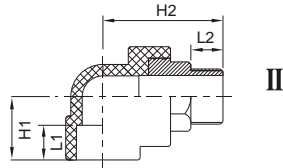
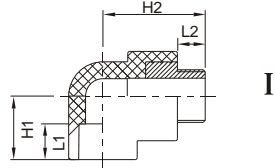
I

II

Part Number	Size (mm)	L1	L2	H1	H2	Qty/Ctn
1090002	20x1/2"	16.5	17.5	30	36	240
1090065	20x3/4"	16.5	17.5	33	36	210
1090095	25x1/2"	18	17.5	33	38	210
1090003	25x3/4"	18	17.5	35	38	180
1090126	32x1/2"	20.5	17.5	35	42	180
1090127	32x3/4"	20.5	17.5	38	42	150
1090004	32x1"	20.5	23	40.5	53	96

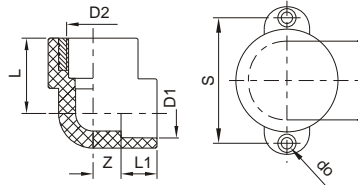
PE Water Pipe Fittings: Socket Joint Fittings

Male Thread Elbow (Soc×Mipt with Metal Insert)



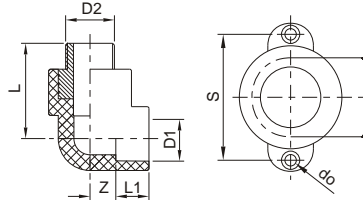
Part Number	Size (mm)	L1	L2	H1	H2	Qty/Ctn
1100002	20x1/2"	16.5	14	30	50	240
1100065	20x3/4"	16.5	14	33	50	150
1100095	25x1/2"	18	14	33	52	210
1100003	25x3/4"	18	14	35	52	150
1100126	32x1/2"	20.5	14	35	56	150
1100127	32x3/4"	20.5	14	38	56	120
1100004	32x1"	20.5	19	40.5	72	80

Female Thread Elbow with Base (Soc×Fipt with Metal Insert)



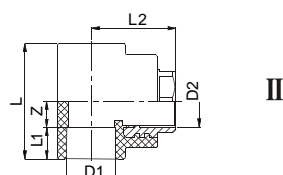
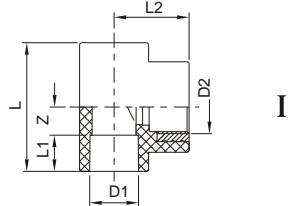
Part Number	Size (mm)	D1	D2	L	S	L1	do	Qty/Ctn
1110002	20x1/2"	20	1/2"	35	50	16	5	210
1110065	20x3/4"	20	3/4"	35	55	16	5	180
1110095	25x1/2"	25	1/2"	37.5	50	18	5	180
1110003	25x3/4"	25	3/4"	37.5	55	18	5	180

Male Thread Elbow with Base (Soc×Mipt with Metal Insert)



Part Number	Size (mm)	D1	D2	L	S	L1	do	Qty/Ctn
1120002	20x1/2"	20	1/2"	49	50	16	5	180
1120065	20x3/4"	20	3/4"	49	55	16	5	150
1120095	25x1/2"	25	1/2"	51.5	50	18	5	180
1120003	25x3/4"	25	3/4"	51.5	55	18	5	150

Female Thread Tee (Soc×Fipt with Metal Insert)

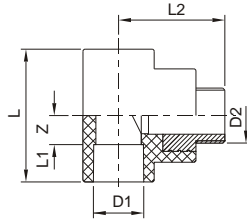


Part Number	Size (mm)	D1	D2	Z	L2	L1	L	Qty/Ctn
1130002	20x1/2"	20	1/2"	12	35	16	56	240
1130065	20x3/4"	20	3/4"	14	35	16	60	210
1130095	25x1/2"	25	1/2"	12	37.5	18	60	180
1130003	25x3/4"	25	3/4"	14	37.5	18	64	150
1130126	32x1/2"	32	1/2"	12	37.5	20.5	65	160
1130127	32x3/4"	32	3/4"	14.5	37.5	20.5	70	144
1130004	32x1"	32	1"	17	52	20.5	75	80

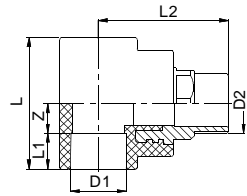
PE Water Pipe Fittings: Socket Joint Fittings

Male Thread Tee

(Soc × Mipt with Metal Insert)



I

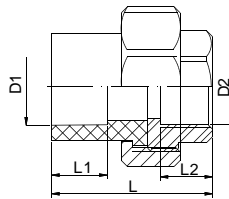


II

Part Number	Size (mm)	D1	D2	Z	L2	L1	L	Qty/Ctn
1140002	20x1/2"	20	1/2"	12	49	16	56	180
1140065	20x3/4"	20	3/4"	14	49	16	60	150
1140095	25x1/2"	25	1/2"	12	51.5	18	60	150
1140003	25x3/4"	25	3/4"	14	51.5	18	64	120
1140126	32x1/2"	32	1/2"	12	51.5	20.5	65	120
1140127	32x3/4"	32	3/4"	14.5	51.5	20.5	70	100
1140004	32x1"	32	1"	17	71	20.5	75	80

Female Thread Union

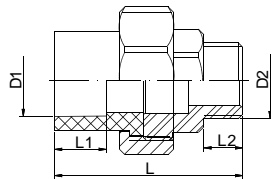
(Soc × Fipt with Metal)



Part Number	Size (mm)	D1	D2	L1	L2	L	Qty/Ctn
1150002	20x1/2"	20	1/2"	16	16	42	180
1150003	25x3/4"	25	3/4"	18	17	47	150
1150004	32x1"	32	1"	20.5	18	52	90

Male Thread Union

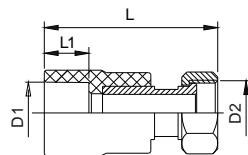
(Soc × Mipt with Metal)



Part Number	Size (mm)	D1	D2	L1	L2	L	Qty/Ctn
1160002	20x1/2"	20	1/2"	16	14	55	150
1160003	25x3/4"	25	3/4"	18	13.5	60	120
1160004	32x1"	32	1"	20.5	19	71	72

Flexible Joint I

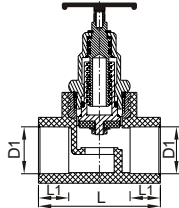
(Soc × Fipt with Metal)



Part Number	Size (mm)	D1	D2	L	L1	Qty/Ctn
1170002	20x1/2"	20	1/2"	67	16	300
1170065	20x3/4"	20	3/4"	68	16	240
1170003	25x1/2"	25	1/2"	69	18	240
1170095	25x3/4"	25	3/4"	70	18	240
1170004	32x1"	32	1"	79	20.5	150

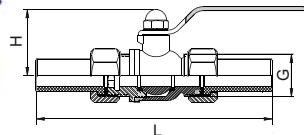
PE Water Pipe Fittings: Socket Joint Fittings

Stop Valve (Soc × Soc)



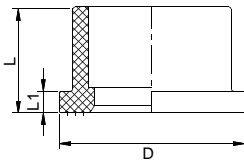
Part Number	Size (mm)	D1	L1	L	Qty/Ctn
1180002	20	20	16	64	96
1180003	25	25	18	74	72
1180004	32	32	20.5	82	48
1180005	40	40	22	85	40
1180006	50	50	25	115	30
1180007	63	63	29	121	20

Ball Valve (Spig × Spig)



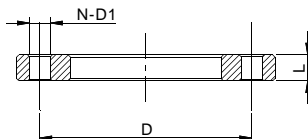
Part Number	Size (mm)	L	G	H	Qty/Ctn
1190002	20	142	3/4"	35	96
1190003	25	153	1"	37	72
1190004	32	172	1 1/4"	47.5	36

Stub Flange (Soc × Flange)



Part Number	Size (mm)	L1	L	D	Qty/Ctn
1200006	50				90
1200007	63	14	34	100	60

Flange (Steel Tray)



Part Number	Size (mm)	D	D1	N	L	Qty/Ctn
1210006	50					
1210007	63	125	18	4	12	

Rubber Gasket

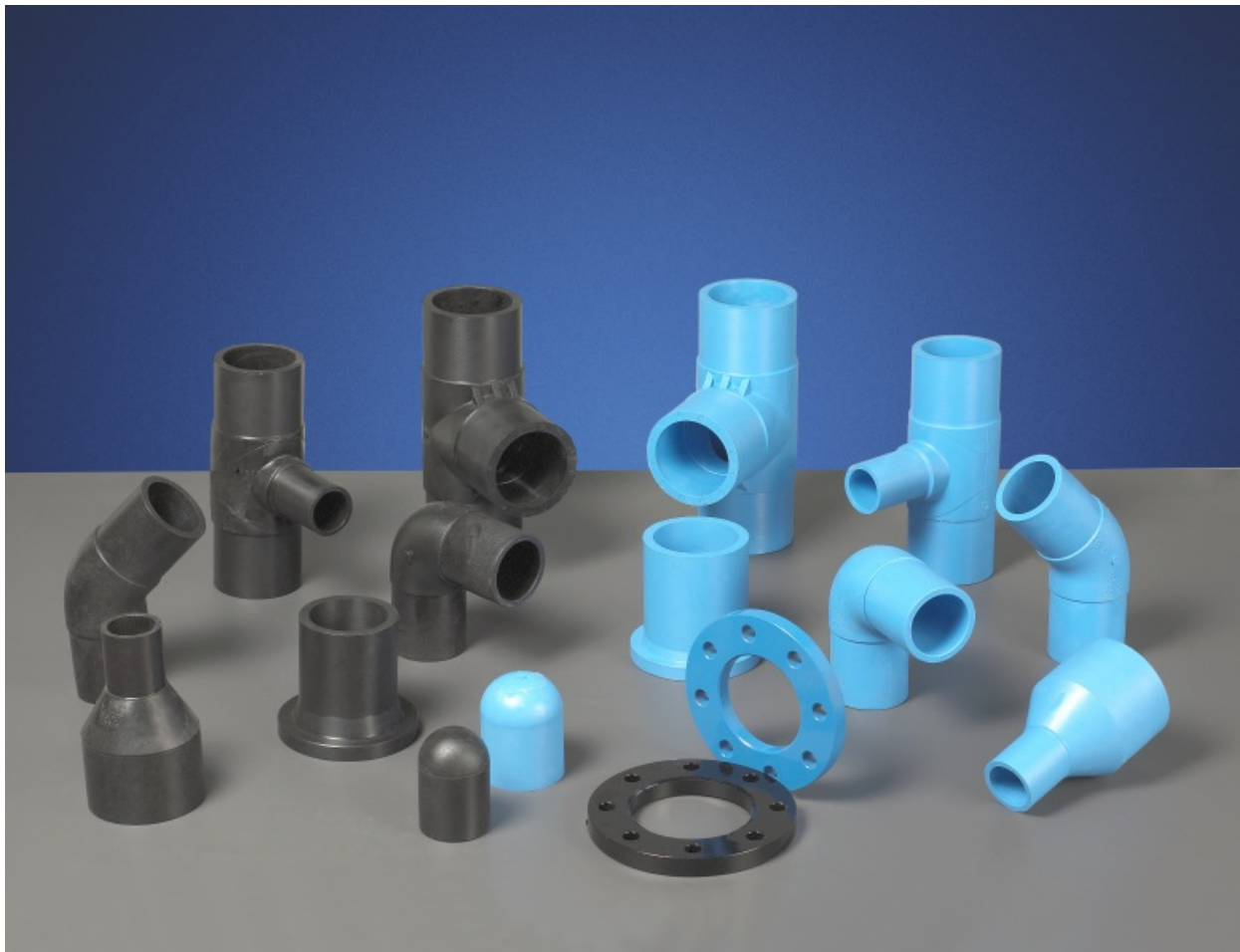


Part Number	Size (mm)	D	D1	N	L	Qty/Ctn
1220006	50					
1220007	63					

Definitions of abbreviated configuration description follow

Soc: Socket
Spig: Spigot

Fipt: Female Iron Pipe Thread
Mipt: Male Iron Pipe Thread



Features

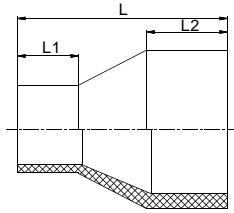
- **Material:** PE 100
- **Size:** full 75mm through 800mm availability
- **Pressure Rating:** 1.0MPa, 1.25MPa, 1.6MPa or other nominal pressures available upon request
- **Standard:** EN 12201-3:2003, AS/NZS 4129:2000
- **Color:** blue (all size)
black (d_n 110 or above)
other colors are also available upon request
- **Joint:** joining pipe and butt joint fittings by butt fusion joint

Advantages

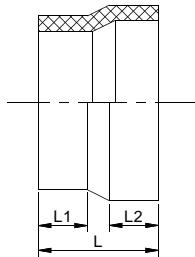
- **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium
- **Corrosion Resistance:** resist chemical matters and electron chemical corrosion
- **Low Installation Costs:** light weight and ease of installation can reduce installation costs
- **High Flow Capacity:** smooth interior walls result in low pressure loss and high volume
- **Longevity:** more than 50 years under proper use

PE Water Pipe Fittings: Butt Joint Fittings

Reducer



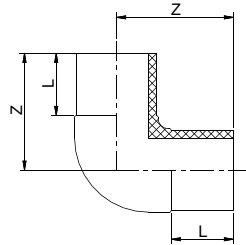
Part Number	SDR	Size (mm)	L1	L2	L	Qty/Ctn
1236255	11	75x63	70	75	156	60
1236286	11	90x63	70	80	178	40
1236287	11	90x75	70	80	164	40
1236316	11	110x50	70	83	196	36
1236317	11	110x63	70	80	196	36
1236318	11	110x75	70	80	184	32
1236319	11	110x90	70	80	169	30
1236348	11	125x63	80	80	200	24
1236350	11	125x90	84	98	242	24
1236351	11	125x110	80	80	178	20
1236412	11	160x90	80	90	242	12
1236413	11	160x110	80	100	228	12
1236414	11	160x125	80	80	195	12
1236441	11	180x63	78	100	266	14
1236444	11	180x110	100	100	239	12
1236447	11	180x160	90	90	230	10
1236475	11	200x110	80	100	226	6
1236478	11	200x160	100	100	239	6
1236479	11	200x180				6
1236509	11	225x160	90	90	230	6
1236511	11	225x200	90	90	206	4



Part Number	SDR	Size (mm)	L1	L2	L	Qty/Ctn
1236537	11	250 x 110	80	90	210	5
1236540	11	250 x 160	80	90	283	3
1236542	11	250 x 200	90	90	246	4
1236543	11	250 x 225	90	90	206	3
1235568	13.6	280 x 110				3
1235571	13.6	280 x 160				4
1235573	13.6	280 x 200	85	85	250	4
1235599	13.6	315 x 110	90	85	225	2
1235602	13.6	315 x 160	90	90	225	2
1235604	13.6	315 x 200	100	100	286	2
1235605	13.6	315 x 225	90	90	222	2
1235606	13.6	315 x 250	90	90	240	
1235607	13.6	315 x 280	85	85	201	
1234635	17	355 x 200				
1234637	17	355 x 250				
1234639	17	355 x 315	90	90	220	
1234666	17	400 x 200				
1234668	17	400 x 250				
1234670	17	400 x 315	80	85	215	
1234671	17	400 x 355				
1234666	17	450 x 200				
1234668	17	450 x 250				
1234701	17	450 x 315	30	55	120	
1234703	17	450 x 400				
1234730	17	500 x 250				
1234732	17	500 x 315				
1234734	17	500 x 400	20	40	105	
1234735	17	500 x 450				
1234765	17	560 x 400				
1234767	17	560 x 500				
1234794	17	630 x 315				
1234796	17	630 x 400				
1234798	17	630 x 500	20	40	105	

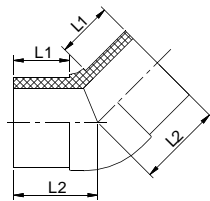
PE Water Pipe Fittings: Butt Joint Fittings

90° Elbow



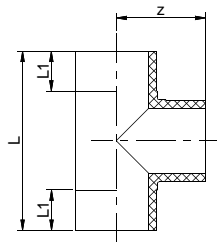
Part Number	SDR	Size (mm)	Z	L	Qty/Ctn
1246008	11	75	132	75	30
1246009	11	90	150	85	20
1246010	11	110	163	87	12
1246011	11	125	170.5	87	8
1246013	11	160	200	100	5
1246014	11	180	210	95	4
1246015	11	200	225	100	3
1244016	17	225			
1246016	11	225			
1244017	17	250			
1246017	11	250			

45° Elbow



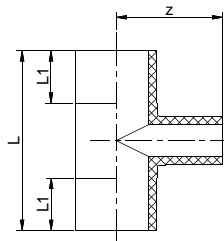
Part Number	SDR	Size (mm)	L1	L2	Qty/Ctn
1256008	11	75	80	124	30
1256009	11	90	85	136	18
1256010	11	110			12
1256011	11	125			10

Tee



Part Number	SDR	Size (mm)	L1	L	Z	Qty/Ctn
1266008	11	75	75	264	132	18
1266009	11	90	85	300	150	14
1266010	11	110	87	326	163	8
1266011	11	125	87	341	170.5	6
1266013	11	160	100	400	210	3
1266014	11	180	95	420	420	3
1266015	11	200	100	450	225	2
1264016	17	225				
1266016	11	225				
1264017	17	250				
1264018	17	280				

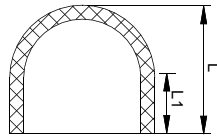
Reducing Tee



Part Number	SDR	Size (mm)	L1	L2	L	Z	Qty/Ctn
1266317	11	110x63	85	85	300	160	10
1266318	11	110x75	85	85	300	160	10
1266319	11	110x90	85	85	300	160	9
1266410	11	160x63	90	90	330	188	6
1266411	11	160x75	90	90	330	188	5
1266412	11	160x90	90	90	330	188	5
1266413	11	160x110	90	90	330	188	5

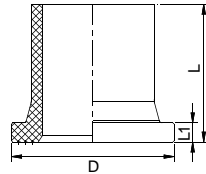
PE Water Pipe Fittings: Butt Joint Fittings

Cap



Part Number	SDR	Size (mm)	L1	L	Qty/Ctn
1276008	11	75	75	113	100
1276009	11	90	75	120	60
1276010	11	110	74	130	40
1276011	11	125	80	143.5	24
1276013	11	160	98	179	15
1276014	11	180	88	180	12
1276015	11	200	98	199	8
1276016	11	225	90	204	5
1276017	11	250	97	224	4
1275018	13.6	280	78	220	4
1276019	11	315	74	140	
1274020	17	355	74	120	
1276021	11	400	74	160	

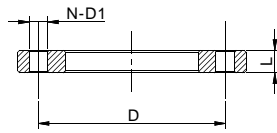
Stub Flange



Part Number	SDR	Size (mm)	D	D1	N	L	Qty/Ctn
1286008	11	75	145	18	4	18	48
1286009	11	90	160	18	4	20	36
1286010	11	110	180	18	8	22	32
1286011	11	125	180	18	8	22	32
1286013	11	160	240	22	8	24	15
1286014	11	180	240	22	8	24	15
1286015	11	200	295	22	8	24	8
1286016	11	225	295	22	8	24	8
1286017	11	250	350	22	12	26	4
1286018	11	280	350	22	12	26	3
1286019	11	315	400	22	12	28	3
1285020	13.6	355	460	23	16	30	1
1284021	17	400	515	26	16	32	1
1284022	17	450	565	26	20	32	
1284023	17	500	620	26	20	32	
1284024	17	560					
1284025	17	630	725	30	20	36	
1284026	17	710					
1284027	17	800	950	33	24	36	

PE Water Pipe Fittings: Butt Joint Fittings

Flange
(Steel Tray)



	Part Number	Size (mm)	L1	L	D	Qty/Ctn
1.6MPa	1296008	75	16	125	122	
	1296009	90	17	140	138	
	1296010	110	18	160	158	
	1296011	125	20.5	162.5	163	
	1296013	160	25	180	212	
	1296014	180	30	190	212	
	1296015	200	32	200	268	
	1296016	225	28.5	202.5	268	
	1296017	250	35	150	320	
1296019	315	35	150	320		
1.0MPa	1294015	200	35	280	370	
	1294016	225	31	280	435	
	1294017	250	33	280	482	
	1294018	280	45	290	537	
	1294019	315	45	290	556	
	1294020	355				
	1294021	400	46	280	685	
	1294022	450				
	1294023	500				
	1294024	560				
1294025	630					
1294026	710					
1294027	800					

Rubber Gasket



	Part Number	Size (mm)	L1	L	D	Qty/Ctn
	1300008	75				
	1300009	90				
	1300010	110				
	1300011	125				
	1300013	160				
	1300014	180				
	1300015	200				
	1300016	225				
	1300017	250				
	1300018	280				
	1300019	315				
	1300020	355				
	1300021	400				
	1300022	450				
	1300023	500				
	1300024	560				
	1300025	630				
	1300026	710				
	1300027	800				



Features

- **Material:** PE 100
- **Size:** full 20mm through 400mm availability
- **Pressure Rating:** 1.6MPa or other nominal pressures available upon request
- **Standard:** EN 12201-3:2003, AS/NZS 4129:2000
- **Color:** blue, black or other colors available upon request
- **Joint:** joining pipe and electro fusion fittings by electro fusion joint

Advantages

- **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium
- **Corrosion Resistance:** resist chemical matters and electron chemical corrosion
- **Low Installation Costs:** light weight and ease of installation can reduce installation costs
- **High Flow Capacity:** smooth interior walls result in low pressure loss and high volume
- **Longevity:** more than 50 years under proper use

PE Water Pipe Fittings: Electro Fusion Fittings

E/F Coupling



Part Number	Size (mm)	Qty/Ctn
1310002	20	
1310003	25	320
1310004	32	240
1310005	40	180
1310006	50	120
1310007	63	80
1310008	75	48
1310009	90	32
1310010	110	18
1310011	125	12
1310013	160	6
1310014	180	4
1310015	200	4
1310017	250	2
1310019	315	1
1310021	400	1
1310023	500	

E/F 90° Elbow



Part Number	Size (mm)	Qty/Ctn
1320003	25	240
1320004	32	160
1320005	40	100
1320006	50	60
1320007	63	40
1320008	75	24
1320009	90	16
1320010	110	9
1320011	125	6
1320013	160	4
1320014	180	2
1320015	200	2
1320017	250	
1320019	315	
1320021	400	

E/F Reducer



Part Number	Size (mm)	Qty/Ctn
1310159	40 × 32	150
1310190	50 × 32	126
1310191	50 × 40	100
1310221	63 × 32	72
1310222	63 × 40	72
1310223	63 × 50	70
1310255	75 × 63	48
1310286	90 × 63	28
1310287	90 × 75	28
1310316	110 × 50	33
1310317	110 × 63	20
1310318	110 × 75	
1310319	110 × 90	24
1310350	125 × 90	14
1310409	160 × 50	
1310410	160 × 63	
1310411	160 × 75	8
1310412	160 × 90	6
1310413	160 × 110	6
1310471	200 × 50	5
1310472	200 × 63	
1310473	200 × 75	
1310474	200 × 90	4
1310475	200 × 110	4
1310478	200 × 160	4
1310534	250 × 63	
1310535	250 × 75	
1310536	250 × 90	
1310537	250 × 110	
1310540	250 × 160	
1310542	250 × 200	
1310604	315 × 200	1
1310606	315 × 250	
1310670	400 × 315	

E/F 45° Elbow



Part Number	Size (mm)	Qty/Ctn
1330004	32	
1330005	40	
1330006	50	80
1330007	63	50
1330008	75	48
1330009	90	20
1330010	110	12
1330011	125	8
1330013	160	4
1330014	180	3
1330015	200	2
1330017	250	1
1330019	315	
1330021	400	

E/F Tee



Part Number	Size (mm)	Qty/Ctn
1340002	20	
1340004	32	120
1340005	40	70
1340006	50	48
1340007	63	30
1340008	75	20
1340009	90	12
1340010	110	7
1340011	125	5
1340013	160	2
1340014	180	2
1340015	200	2
1340017	250	1
1340019	315	
1340021	400	

E/F: Electro Fusion

PE Water Pipe Fittings: Electro Fusion Fittings

E/ F Reducing Tee



Part Number	Size (mm)	Qty/Ctn
1340126	32 × 20	130
1340127	32 × 25	130
1340157	40 × 20	90
1340158	40 × 25	90
1340159	40 × 32	90
1340188	50 × 20	70
1340189	50 × 25	65
1340190	50 × 32	60
1340191	50 × 40	60
1340219	63 × 20	40
1340220	63 × 25	40
1340221	63 × 32	40
1340222	63 × 40	40
1340223	63 × 50	36
1340284	90 × 40	16
1340285	90 × 50	16
1340286	90 × 63	15
1340287	90 × 75	14
1340316	110 × 50	10
1340317	110 × 63	10
1340318	110 × 75	9
1340319	110 × 90	9
1340348	125 × 63	6
1340349	125 × 75	6
1340350	125 × 90	6
1340351	125 × 110	6
1340409	160 × 50	
1340410	160 × 63	4
1340411	160 × 75	3
1340412	160 × 90	3
1340413	160 × 110	3
1340471	200 × 50	2
1340472	200 × 63	2
1340473	200 × 75	
1340474	200 × 90	
1340475	200 × 110	2
1340478	200 × 160	2
1340533	250 × 50	
1340534	250 × 63	
1340535	250 × 75	
1340536	250 × 90	
1340537	250 × 110	1
1340540	250 × 160	
1340542	250 × 200	
1340598	315 × 90	
1340599	315 × 110	
1340602	315 × 160	
1340604	315 × 200	
1340606	315 × 250	
1340661	400 × 110	
1340664	400 × 160	
1340666	400 × 200	
1340668	400 × 250	
1340670	400 × 315	

E/F Stub Flange



Part Number	Size (mm)	Qty/Ctn
1350010	110	20
1350013	160	7
1350015	200	6
1350017	250	3
1350019	315	1
1350021	400	

E/F Flange (Steel Tray)



Part Number	Size (mm)	Qty/Ctn
1360010	110	
1360013	160	
1360015	200	
1360017	250	
1360019	315	
1360021	400	

E/F Straight Saddle



Part Number	Size (mm)	Qty/Ctn
1370286	90x63	
1370317	110x63	30
1370348	125X63	
1370410	160X63	30
1370472	200X63	
1370474	200X90	12
1370536	250X90	12
1370599	315X110	4
1370602	315X160	3

E/F Tapping Saddle



Part Number	Size (mm)	Qty/Ctn
1380221	63x32	
1380286	90x63	
1380315	110x40	
1380317	110x63	
1380410	160x63	
1380474	200x90	
1380536	250x90	

E/F Stop Saddle



Part Number	Size (mm)	Qty/Ctn
1390009	90	
1390010	110	
1390011	125	
1390013	160	
1390015	200	
1390017	250	
1390019	315	8



Features

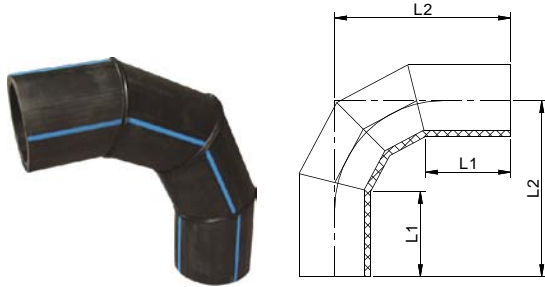
- **Material:** PE 100
- **Size:** full 110mm through 800mm availability
- **Pressure Rating:** 0.6MPa, 1.0MPa, 1.6MPa or other nominal pressures available upon request
- **Standard:** EN 12201-3:2003
- **Color:** blue, black with blue stripes or other colors available upon request
- **Angles:** various angles available upon request
- **Joint:** joining pipe and fabricated fittings by butt fusion joint

Advantages

- **Non-toxic:** no heavy metal additives, would not be covered with dirt or contaminated by bacterium
- **Corrosion Resistance:** resist chemical matters and electron chemical corrosion
- **Low Installation Costs:** light weight and ease of installation can reduce installation costs
- **High Flow Capacity:** smooth interior walls result in low pressure loss and high volume
- **Longevity:** more than 50 years under proper use

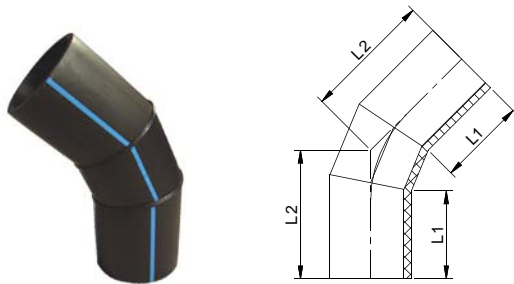
PE Water Pipe Fittings: Fabricated Fittings

Fabricated 90° Elbow



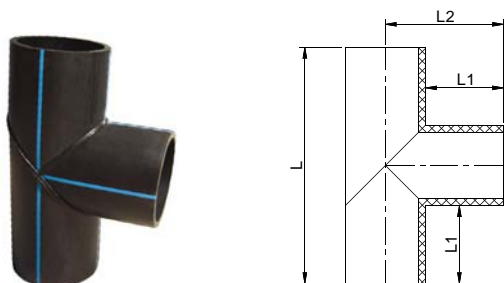
Part Number	Size (mm)	L1	L2	Qty/Ctn
0.6, 1.0 MPa 1.6MPa				
1404014	1406014	180		
1404015	1406015	200		
1404016	1406016	225	210	488
1404017	1406017	250	265	625
1404018	1406018	280		
1404019	1406019	315	374	773
1404020	1406020	355	374	833
1404021	1406021	400	374	900
1404022	1406022	450	410	975
1404023	1406023	500	405	1100
1404024	1406024	560		
1404025	1406025	630	526	1295
1404026	710			
1404027	800			

Fabricated 45° Elbow



Part Number	Size (mm)	L1	L2	Qty/Ctn
0.6, 1.0 MPa 1.6MPa				
1414010	1416010	110	160	218
1414011	1416011	125	160	228
1414013	1416013	160	165	249
1414014	1416014	180		
1414015	1416015	200	180	274
1414016	1416016	225	180	290
1414017	1416017	250	245	362
1414018	1416018	280		
1414019	1416019	315	340	498
1414020	1416020	355	340	520
1414021	1416021	400	363	548
1414022	1416022	450	363	580
1414023	1416023	500	400	950
1414024	1416024	560		
1414025	1416025	630	500	1180

Fabricated Tee



Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1420016	225	150	265	530	
1420017	250	250	350	750	
1420018	280				
1420019	315	300	460	920	
1420020	355	300	480	960	
1420021	400	300	500	1000	
1420022	450	305	530	1060	
1420023	500	350	600	1200	
1420024	560				
1420025	630	350	665	1300	

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

PE Water Pipe Fittings: Fabricated Fittings

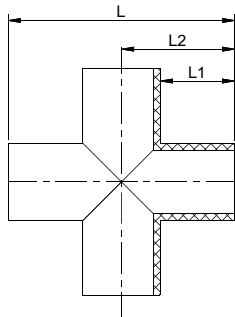
Fabricated Reducing Tee



Part Number	Size (mm)	Qty/Ctn	Part Number	Size (mm)	Qty/Ctn
1420472	200X63		1420659	400X75	
1420473	200X75		1420660	400X90	
1420474	200X90		1420661	400X110	
1420503	225X63		1420662	400X125	
1420504	225X75		1420664	400X160	
1420505	225X90		1420689	450X63	
1420506	225X110		1420690	450X75	
1420534	250X63		1420691	450X90	
1420535	250X75		1420692	450X110	
1420536	250X90		1420693	450X125	
1420537	250X110		1420695	450X160	
1420538	250X125		1420720	500X63	
1420565	280X63		1420721	500X75	
1420566	280X75		1420722	500X90	
1420567	280X90		1420723	500X110	
1420568	280X110		1420724	500X125	
1420569	280X125		1420726	500X160	
1420596	315X63		1420754	560X110	
1420597	315X75		1420757	560x160	
1420598	315X90		1420782	630X63	
1420599	315X110		1420783	630X75	
1420600	315X125		1420784	630X90	
1420602	315X160		1420785	630X110	
1420627	355X63		1420786	630X125	
1420628	355X75		1420788	630X160	
1420629	355X90				
1420630	355X110				
1420631	355X125				
1420633	355X160				
1420658	400X63				

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

Fabricated Cross



Part Number	Size (mm)	L1	L2	L	Qty/Ctn
1430010	110	150	205	410	
1430011	125	150	215	430	
1430013	160	150	230	460	
1430015	200				
1430016	225	150	250	500	
1430017	250	150	265	530	
1430018	280	250	350	750	
1430019	315				
1430020	355	300	460	920	
1430021	400	300	480	960	
1430022	450	300	500	1000	
1430023	500				
1430024	560				
1430025	630				

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

PE Water Pipe Fittings: Fabricated Fittings

Fabricated Reducing Tee Assembly



Part Number	Size (mm)	Qty/Ctn	Part Number	Size (mm)	Qty/Ctn
1440471	200x50	2	1440670	400 × 315	2
1440475	200x110	2	1440671	400 × 355	2
1440476	200x125	3	1440696	450 × 180	4
1440478	200x160	2	1440697	450 × 200	3
1440502	225x50	2	1440698	450 × 225	3
1440507	225x125	3	1440699	450 × 250	3
1440509	225x160	2	1440700	450 × 280	3
1440511	225x200	2	1440701	450 × 315	2
1440533	250x50	2	1440702	450 × 355	2
1440540	250x160	2	1440703	450 × 400	2
1440542	250x200	2	1440727	500 × 180	5
1440543	250x225	2	1440728	500 × 200	4
1440571	280x160	2	1440729	500 × 225	4
1440573	280x200	2	1440730	500 × 250	4
1440595	315 × 50	3	1440731	500 × 280	4
1440603	315 × 180	3	1440732	500 × 315	3
1440604	315 × 200	2	1440733	500 × 355	3
1440605	315 × 225	2	1440734	500 × 400	2
1440606	315 × 250	2	1440735	500 × 450	2
1440607	315 × 280	2	1440760	560 × 225	4
1440626	355 × 50	2	1440762	560 × 280	4
1440634	355 × 180	4	1440763	560 × 315	3
1440635	355 × 200	3	1440789	630 × 180	6
1440636	355 × 225	3	1440790	630 × 200	5
1440637	355 × 250	3	1440791	630 × 225	5
1440638	355 × 280	3	1440792	630 × 250	5
1440639	355 × 315	2	1440793	630 × 280	5
1440657	400 × 50	3	1440794	630 × 315	4
1440666	400 × 200	3	1440795	630 × 355	4
1440667	400 × 225	3	1440796	630 × 400	3
1440668	400 × 250	3	1440797	630 × 450	3
1440669	400 × 280	3	1440798	630 × 500	2

Nominal Pressure is available in 0.6MPa, 1.0MPa and 1.6MPa.

Pipe Cutter		Part Number	Model	Application Range		
		1450001	TU 140	50~140		
		1450002	T3	100~160		
		1450003	T4	180~315		
Rotation Pipe Cutter		Part Number	Model	Application Range		
		1460001	Pcu90~315	90~315		
Blade Scraper		Part Number	Model	Application Range		
		1470001	Small Scraper	1.5"		
		1470002	Big Scraper	2.0"		
Rotation Scraper		Part Number	Model	Application Range		
		1480001	RTC160	50~160		
		1480002	RTC315	75~315		
Socket Fusion Welding Machine		Part Number	Model	Application Range		
		1490001	1000w	20~63		
		1490002	1600w	75~110		
		1490003	2500w	160		
Melting Socket		Part Number	Model	Application Range		
		1500002		20		
		1500003		25		
		1500004		32		
		1500005		40		
		1500006		50		
		1500007		63		
		1500008		75		
		1500009		90		
		1500010		110		
		1500013		160		
		Butt Fusion Welding Machine		Part Number	Model	Application Range
				1510001	160	75~160
				1510002	250	110~250
1510003	315			160~315		
1510004	450			280~450		
1510005	630			400~630		
1510006	800			630~800		
Electro Fusion Welding Machine		Part Number	Model	Application Range		
		1520001	DRJ-III			
		1520002	DRJ- I			

It can save the data and the data can be printed when connecting to the computer.

Installations: Socket Fusion Joint

(1) Socket Fusion Joint

Step: (Use Socket Fusion Welding Machine)



① Check and measure

- Check the pipe and fittings to see whether they are damaged, and make the incision smooth.
- Measure the depth of socket, mark on the pipe surface.



② Chamfer

- Chamfer the nozzle, the angle should be 30°, the length of surface groove should not exceed 2.0mm.



③ Clean and dry

- Clean and dry the pipe's spigot and the fittings' socket.



④ Heat

- Push the end of the pipe and fittings, without turning, up to the welding depth into the welding machine, heat up the end of the pipe and fittings.



⑤ Join and cool

- Pull out the pipe and fittings from the welding machine when the scheduled heating is over, insert the pipe's spigot into the fittings' socket evenly and swiftly.
- Not continue the next step until the scheduled cooling is over.

Recommended technical parameter for Socket Fusion Joint

(Thermal temperature is 260°C ± °C)

Outer Diameter (mm)	Heating Time(s)	Maximum Transit Time (s)	Minimum Cooling Time (s)
20	5	4	2
25	7	4	2
32	8	6	4
40	12	6	4
50	18	6	4
63	24	8	6

Installations: Butt Fusion Joint

(2) Butt Fusion Joint

Step: (Use Butt Fusion Welding Machine)



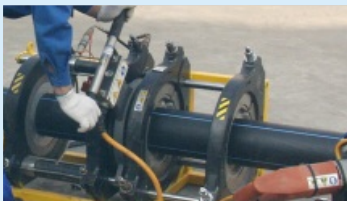
① **Prepare**

- Prepare the necessary tools.



② **Clamp and clean**

- Clamp down the pipe on the jig, clean up the joint parts, mill the joint sides, and then adjust the joint parts to make the misplacement less than 10% of the wall thickness.



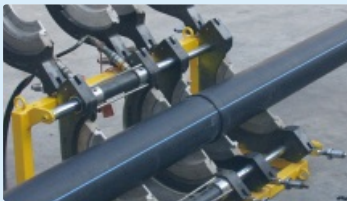
③ **Heat**

- Put the heating panel.



④ **Join**

- Remove the heating panel after finishing heating, join the two heating parts swiftly, increase pressure up to the fusion-joint pressure and keep until it cools down.



⑤ **Complete**

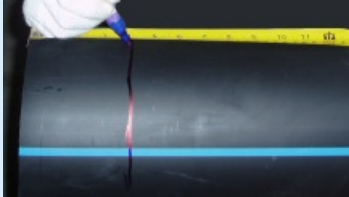
- Butt Fusion Joint is completed.

Recommended welding parameter, which should be followed by the welders

Wall Thickness (mm)	Preheating Curling Height (mm) (Preheating Temperature is $210 \pm 10^\circ\text{C}$)	Preheating Time(s) (Temperature is $210 \pm 10^\circ\text{C}$)	Allowed Maximum Transit Time(s)	Cooling Time for the Weld Seam under Pressure-reserving State (min)
2.0 - 3.9	0.5	30 - 40	4	4 - 5
4.3 - 6.9	0.5	40 - 70	5	6 - 10
7.0 - 11.4	1.0	70 - 120	6	10 - 16
12.2 - 18.2	1.0	120 - 170	8	17 - 24
20.1 - 25.5	1.5	210 - 250	10	25 - 32
28.3 - 32.2	1.5	280 - 320	12	33 - 40

(3) Electro Fusion Joint

Step: (Use Electro Fusion Welding Machine)



① **Clean and mark**

- Clean up the connection part, mark the inserting depth.



② **Scrape**

- Scrape and polish the joint surface.



③ **Align and restrain the fittings to the pipes**



④ **Apply electric current**

- Apply the electric current to the fittings; the joining parts will be heated and melted, turn off the current when there is melt flowing in the observation hole.



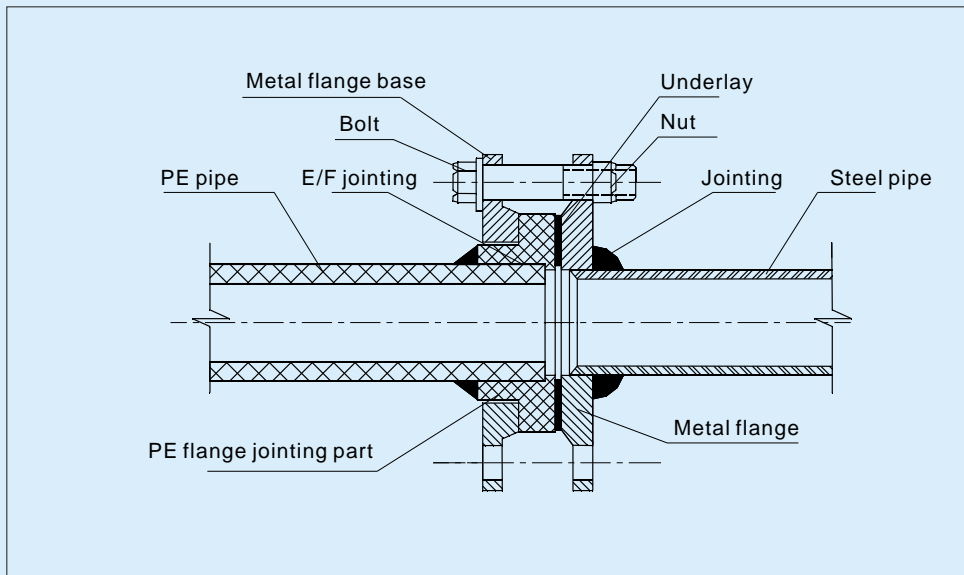
⑤ **Cool**

- Cool without movement or pressure.

Note: While connecting, the heating voltage and time should comply with manufacture's technical stipulations of Electro Fusion Welding Machine.

(4) Transition Joint

Join the PE pipe and the iron pipe by Flange Joint



PE Water Pipe complies with BS 6920

WRAS
Water Regulations Advisory Scheme

WRAS 100% Guarantee
WATER RESISTANCE TO RISKY CONTAMINANTS
WATER RESISTANCE TO RISKY CONTAMINANTS

WRAS 100% Guarantee
WATER RESISTANCE TO RISKY CONTAMINANTS
WATER RESISTANCE TO RISKY CONTAMINANTS

WRc-NSF
EVALUATION AND TESTING CENTRE

WATER REGULATIONS ADVISORY SCHEME
BS6920 TEST ON EFFECT OF WATER QUALITY
FINAL REPORT

Organisation: Guangdong Liansu Technology Industry Co. Ltd
Product: PE Tube

WRc-NSF REPORT No MATLAB 357K
Date of Report 11th October 2005

WRc-NSF Final Report for the Testing of a Product for Water Regulations Advisory Scheme Approval

WRc-NSF Report No: WR15/04-253K
Name of Organisation: Guangdong Liansu Technology Industry Co Ltd
Product: PE Tube
Date of Report: 11/10/05

1. SUMMARY

Test	Result
Odour and flavour of water	Pass
Appearance of water	Pass
Growth of aquatic microorganisms	Pass
The extraction of substances that may be of concern to public health	Pass
Extraction of metals	Pass

This product has satisfied the criteria set out in BS6920 Part 1: 2000 'Specification' and thus complies with the requirements of the Water Regulations Advisory Scheme Tests of Effect on Water Quality and is suitable for use with cold water but not hot water.

Mark Norris
Mark Norris, Materials Test Manager Date: 11th Oct 2005

PE Water Pipe complies with ISO 4427

NUTEK SYSTEMS, LTD.
TEST REPORT

OUR REFERENCE NO.: N0071-2
DESCRIPTION OF SAMPLE: Polyethylene (PE) pipe of type PE100, size: 32mm, 50mm, 75mm, 110mm, 160mm and 200mm

SAMPLE SUBMITTED BY: Tai Yee Pipe Limited
BRAND: L & S
MANUFACTURER: Guangdong Liansu Technology Industry Co. Ltd

METHOD OF TEST: ISO4427:1996
PERIOD OF TESTS: 13th July to 4th October 2004

RESULTS: (Apply only to the sample tested)

1. DIMENSIONS (ISO4427 Clause 4.1)

Nominal size (mm)	Mean outside diameter		Minimum wall thickness (mm)	
	Sample	ISO Requirement	Sample	ISO Requirement
32	32.5	32 ±0.3	3.0	3.0 ±0.3
50	51.4	50 ±0.5	4.5	4.5 ±0.3
75	76.85	75 ±0.5	6.6	6.2 ±1.2
110	110.3	110 ±1.0	10.17	10.0 ±1.3
160	160.0	160 ±1.5	15.8	14.8 ±2.3
200	200.1	200 ±1.8	19.9	18.3 ±3.6

2. THERMAL STABILITY (ISO4427 Clause 3.3)

Sample	Thickness (mm)	Subsidence rate at temperature of 200 ±5 (mm/m)		Remark
		Sample	ISO Requirement	
32mm	3.0	> 50	Pass	
50mm	4.5	> 50	Pass	
75mm	6.6	> 50	Pass	
110mm	10.17	> 50	Pass	
160mm	15.8	> 50	Pass	
200mm	19.9	> 50	Pass	
ISO Requirement		≤ 30	?	

NUTEK SYSTEMS, LTD.
TEST REPORT

OUR REFERENCE NO.: N0071-2 (P.2)

3. HYDROSTATIC STRENGTH (ISO4427 Clause 5.1)

Sample	Nominal size (mm)	Test temperature (°C)	Test loop stress (MPa)	Test pressure (bar)	Duration (h)	Remark	
							Test pressure (bar)
32mm	32	20	5.5	23.4	180	Pass	
				11.3	165	Pass	
	86	5.0	16.3	5000	Pass		
			29.3	180	Pass		
	50mm	50	5.5	11.2	165	Pass	
				16.3	5000	Pass	
	75mm	75	5.0	12.6	28.3	180	Pass
				11.6	165	Pass	
	110mm	110	5.0	10.6	3000	Pass	
				29.3	180	Pass	
	160mm	160	5.0	12.4	27.3	180	Pass
				11.1	3000	Pass	
200mm	200	5.0	11.0	3000	Pass		
			27.4	180	Pass		
ISO Requirement for pipe of PE100	32	20	5.5	11.3	165	Pass	
				11.1	3000	Pass	
				16.5	?	?	

4. LONGITUDINAL REVERSION (ISO4427 Clause 4.3)

Sample	Nominal size (mm)	Test temperature (°C)	Drop in (mm)	Maximum % decrease in length	ISO Requirement	Remark
32mm	32	110	30	1.3	Pass	
			30	1.25	Pass	
50mm	50	110	30	1.6	Pass	
			30	1.5	Pass	
75mm	75	110	30	1.7	Pass	
			30	1.7	Pass	
110mm	110	110	30	1.9	Pass	
			30	1.9	Pass	
ISO Requirement	32	110	30	1.5	Pass	

NUTEK SYSTEMS, LTD.
TEST REPORT

OUR REFERENCE NO.: N0071-2 (P.1)

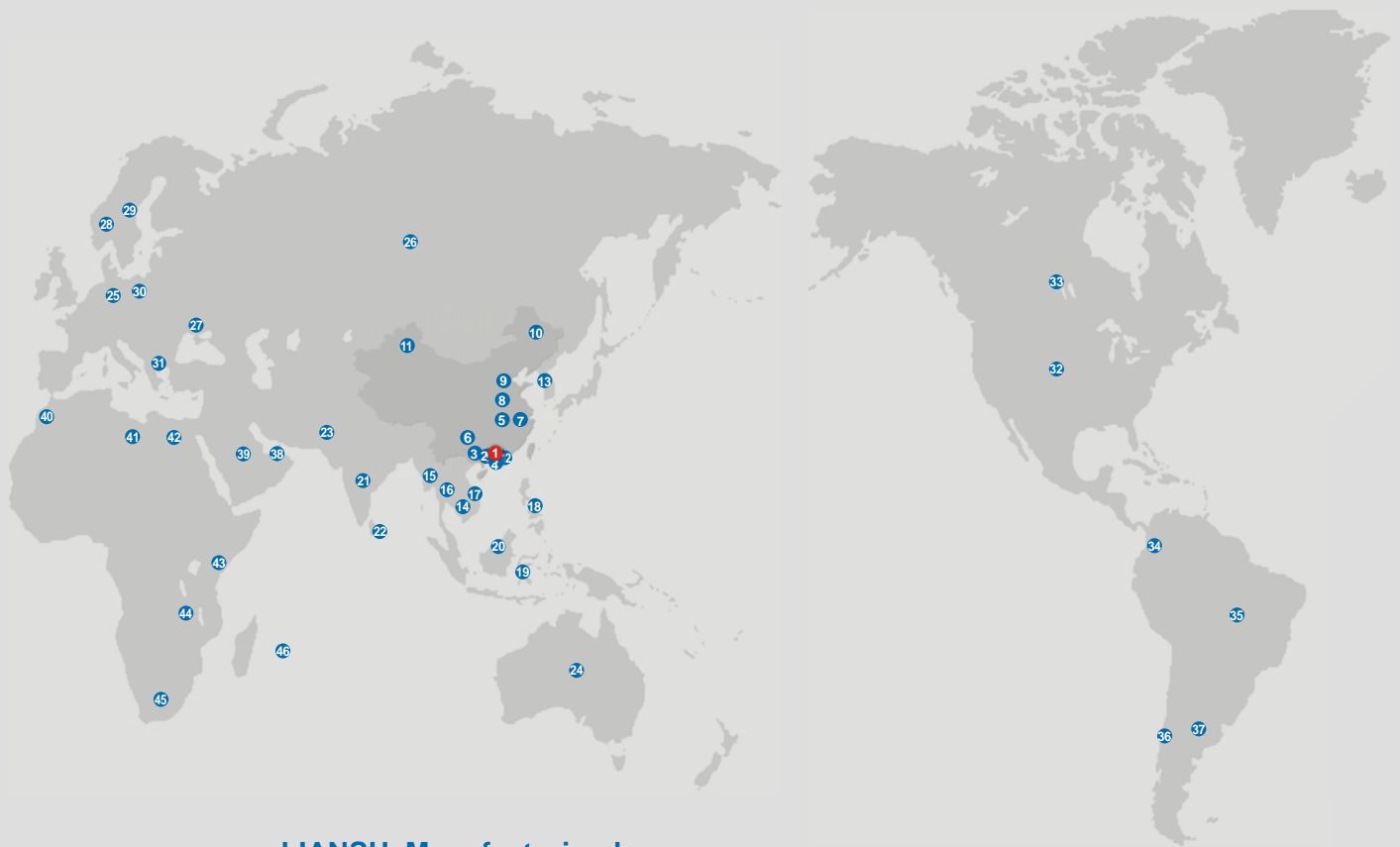
5. SUMMARY OF RESULTS (apply only to the sample tested)

Dimensional stability - Satisfactory
Thermal stability - Satisfactory
Hydrostatic strength - Satisfactory
Longitudinal reversion - Satisfactory

Date: 11th October 2005
Mark Norris, Test Manager
Gordon W.K. Yip, Director

BS 6920: Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water

ISO 4427: Plastics piping systems -- Polyethylene (PE) pipes and fittings for water supply



LIANSU Manufacturing bases

- | | | | |
|---------------------|------------------------|--------------------|-------------------------|
| 1. Guangdong Shunde | 4. Guangdong Zhongshan | 7. Jiangsu Nanjing | 10. Heilongjiang Daqing |
| 2. Guangdong Heshan | 5. Hubei Wuhan | 8. Henan Zhoukou | 11. Sinkiang Urumchi |
| 3. Guangdong Yunan | 6. Guizhou Guiyang | 9. Hebei Renjiu | |

LIANSU Service Network

Asia

- 12. Hongkong
- 13. Korea
- 14. Kampuchea
- 15. Burma
- 16. Thailand
- 17. Vietnam
- 18. Philippine
- 19. Indonesia
- 20. Malaysia
- 21. India
- 22. Sri Lanka
- 23. Pakistan

Oceania

- 24. Australia

Europe

- 25. Germany
- 26. Russia
- 27. Ukraine
- 28. Norway
- 29. Sweden
- 30. Poland
- 31. Macedonia

North America

- 32. USA
- 33. Canada

South America

- 34. Colombia
- 35. Brazil
- 36. Chile
- 37. Argentina

Middle East

- 38. United Arab Emirates
- 39. Saudi Arabia

Africa

- 40. Morocco
- 41. Libya
- 42. Egypt
- 43. Tanzania
- 44. Zambia
- 45. South Africa
- 46. Mauritius



[Http://www.liansu.com](http://www.liansu.com)

GUANGDONG LIANSU TECHNOLOGY INDUSTRIAL CO.,LTD.(CHINA)

Headquarters: Liansu Industrial Estate, Longjiang Town, Shunde Zone, Foshan City, Guangdong (China)

Tel: +86-757-23379211

Fax: +86-757-23378980

E-mail: oversea@liansu.com

This catalog has been prepared as a support guide. Under no circumstances shall LIANSU assume any liability or responsibility with the information in this catalog. Every effort has been made by LIANSU to provide accurate and up to date information.