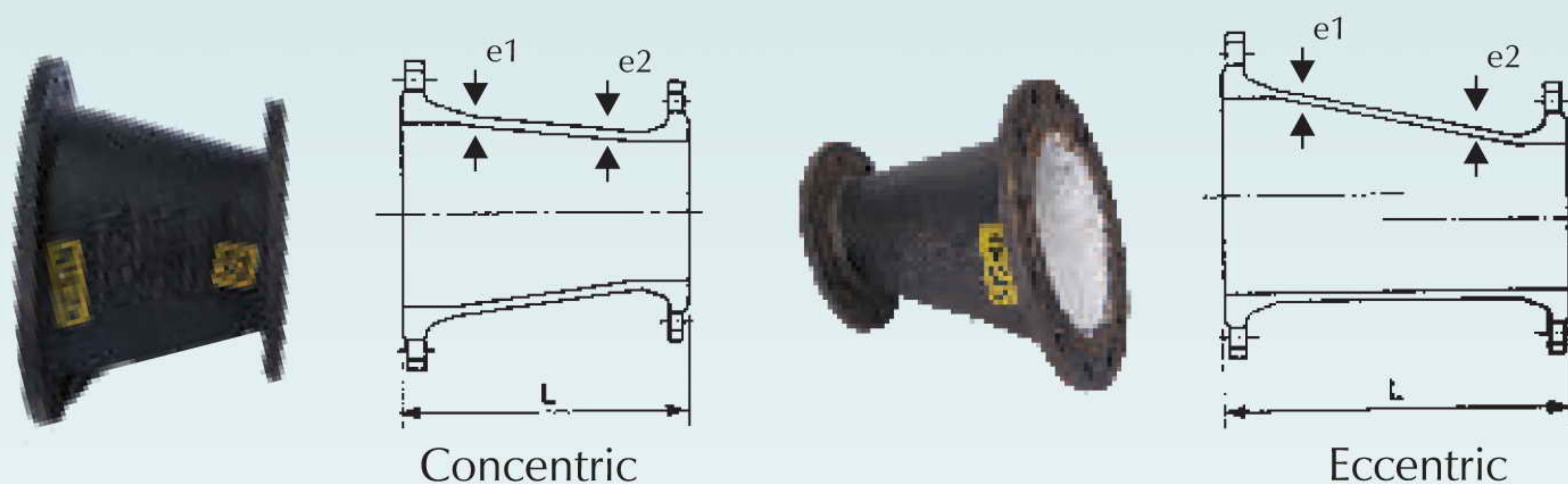


Fittings

UNITECH Double Flanged Tapers



K - 12

TABLE - 34

Nominal Diameter		e ₁	e ₂	L	App. Mass (kg)			
					Concentric		Eccentric	
DN	dn				PN 10	PN 16	PN 10	PN 16
100	80	7.2	7.0	200	9	9	12	12
125	80	7.5	7.0	200	14	14	17	17
125	100	7.5	7.2	200	15	15	18	18
150	80	7.8	7.0	200	15	15	20	20
150	100	7.8	7.2	200	16	16	19	22
150	125	7.8	7.5	200	17	17	17	23
200	100	8.4	7.2	300	20	20	34	26
200	125	8.4	7.5	300	21	21	32	28
200	150	8.4	7.8	300	22	22	28	28
250	125	9.0	7.5	300	30	31	36	36
250	150	9.0	7.8	300	30	31	36	36
250	200	9.0	8.4	300	31	32	37	37
300	150	9.6	7.8	300	36	38	47	48
300	200	9.6	8.4	300	38	40	48	50
300	250	9.6	9.0	300	40	42	49	52
350	200	10.2	8.4	300	48	51	58	61
350	250	10.2	9.0	300	48	52	59	64
350	300	10.2	9.6	300	50	54	60	64
400	200	10.8	8.4	300	57	65	68	78
400	250	10.8	9.0	300	60	66	70	79
400	300	10.8	9.6	300	62	68	71	80
400	350	10.8	10.2	300	64	72	72	82
450	250	11.4	9.0	300	68	77	82	97
450	300	11.4	9.6	300	70	79	83	98
450	350	11.4	10.2	300	72	83	84	100
450	400	11.4	10.8	300	75	88	85	101

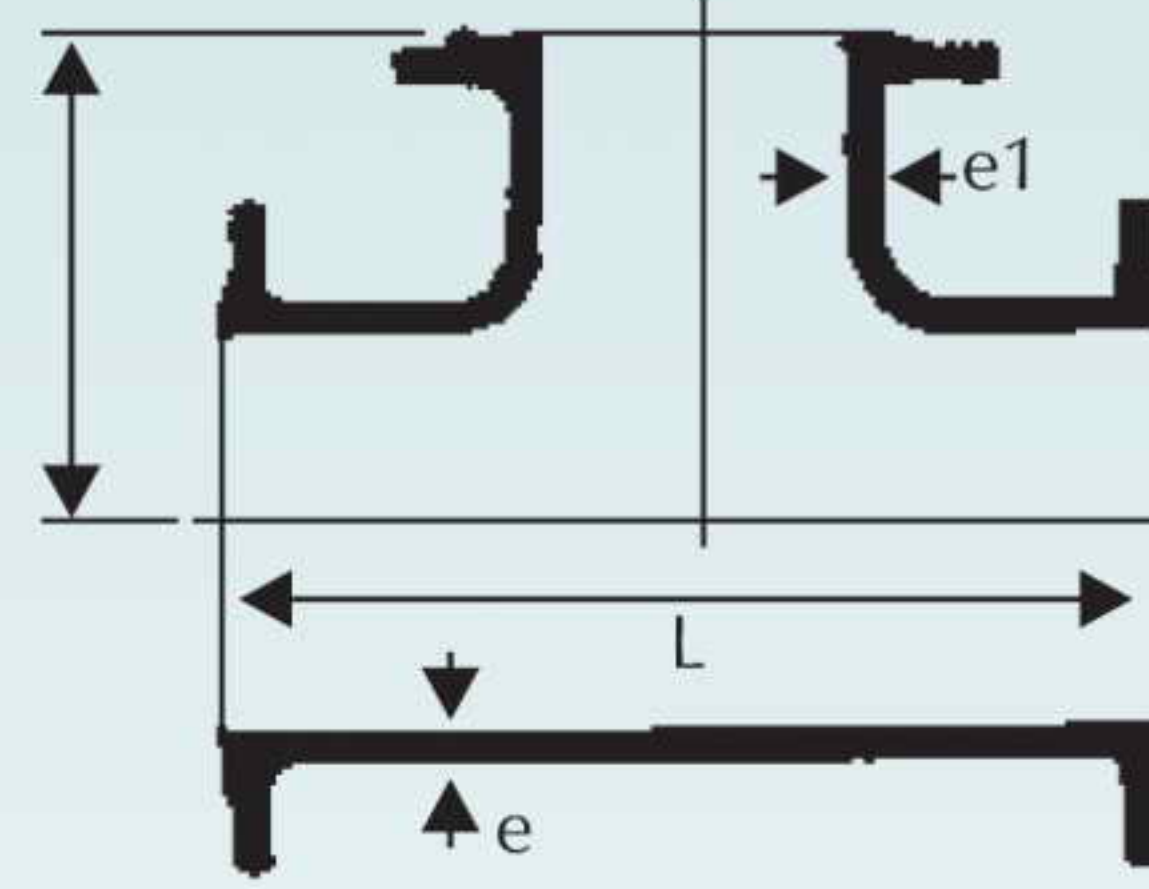
TABLE - 34 Contd.

Nominal Diameter		e ₁	e ₂	L	App. Mass (kg)			
					Concentric		Eccentric	
DN	dn					PN 10	PN 16	
500	300	12.0	9.6	600	109	123	132	154
500	350	12.0	10.2	600	110	126	133	156
500	400	12.0	10.8	600	113	131	136	160
500	450	12.0	11.4	600	116	137	140	173
600	350	13.2	10.2	600	145	182	178	218
600	400	13.2	10.8	600	148	185	180	222
600	450	13.2	11.4	600	150	189	182	227
600	500	13.2	12.0	600	154	193	185	232
700	400	14.4	10.8	600	188	226	236	271
700	450	14.4	11.4	600	190	230	238	276
700	500	14.4	12.0	600	194	235	240	282
700	600	14.4	13.2	600	204	241	245	290
750	450	15.0	11.4	600	213	250	256	300
750	500	15.0	12.0	600	215	255	258	306
750	600	15.0	13.2	600	220	260	264	312
750	700	15.0	14.4	600	234	270	281	324
800	450	15.6	11.4	600	254	280	305	336
800	500	15.6	12.0	600	256	284	307	341
800	600	15.6	13.2	600	260	288	312	346
800	700	15.6	14.4	600	263	292	316	350
900	500	16.8	12.0	600	310	345	372	414
900	600	16.8	13.2	600	315	348	378	418
900	700	16.8	14.4	600	320	352	384	422
900	800	16.8	15.6	600	325	360	390	432
1000	600	18.0	13.2	600	380	420	456	504
1000	700	18.0	14.4	600	385	425	462	510
1000	800	18.0	15.6	600	390	435	468	522
1000	900	18.0	16.8	600	393	450	472	540
1100	700	19.2	14.4	600	455	515	546	618
1100	800	19.2	15.6	600	460	525	552	630
1100	900	19.2	16.8	600	465	540	558	648
1100	1000	19.2	18.0	600	474	550	569	660

TABLE - 34 Contd.

Nominal Diameter		e ₁	e ₂	L	App. Mass (kg)			
					Concentric		Eccentric	
DN	dn							
					PN 10	PN 16	PN 10	PN 16
1200	700	20.4	14.4	790	597	685	716	822
1200	800	20.4	15.6	790	600	695	720	834
1200	900	20.4	16.8	790	605	700	726	840
1200	1000	20.4	18.0	790	614	710	737	852
1200	1100	20.4	19.2	790	640	740	768	888
1400	800	22.8	15.6	850	825	930	990	1116
1400	900	22.8	16.8	850	830	935	996	1122
1400	1000	22.8	18.0	850	840	950	1008	1140
1400	1100	22.8	19.2	850	850	960	1020	1152
1400	1200	22.8	20.4	850	859	980	1031	1176
1500	900	24.0	16.8	910	1100	1215	1320	1458
1500	1000	24.0	18.0	910	1110	1230	1332	1476
1500	1100	24.0	19.2	910	1120	1250	1344	1500
1500	1200	24.0	20.4	910	1130	1270	1356	1524
1500	1400	24.0	22.8	910	1145	1290	1374	1548
1600	1000	25.2	18.0	910	1130	1265	1356	1518
1600	1100	25.2	19.2	910	1140	1275	1368	1530
1600	1200	25.2	20.4	910	1150	1295	1380	1554
1600	1400	25.2	22.8	910	1165	1311	1398	1573
1600	1500	25.2	24.0	910	1200	1380	1440	1656
1800	1100	27.6	19.2	970	1475	1690	1770	2028
1800	1200	27.6	20.4	970	1485	1700	1782	2040
1800	1400	27.6	22.8	970	1500	1715	1800	2058
1800	1500	27.6	24.0	970	1510	1730	1812	2076
1800	1600	27.6	25.2	970	1530	1750	1836	2100

NOTE : 1. Sizes & Dimensions in **RED** are non standard as per IS-9523-2000.
 2. Tapers in combination of sizes other than above can also be manufactured against specific requirement.



K - 12

TABLE - 35

Nominal Diameter		e ₁	e ₂	L	H	App. Mass (kg)	
DN	dn					PN 10	PN 16
80	80	7.0	7.0	330	165	16	16
100	80	7.2	7.0	360	175	18	18
100	100	7.2	7.2	360	180	19	19
125	80	7.5	7.0	400	190	23	23
125	100	7.5	7.2	400	195	24	24
125	125	7.5	7.5	400	200	25	25
150	80	7.8	7.0	440	205	28	28
150	100	7.8	7.2	440	210	29	29
150	125	7.8	7.5	440	215	30	30
150	150	7.8	7.8	440	220	32	32
200	80	8.4	7.0	520	235	41	41
200	100	8.4	7.2	520	240	42	42
200	150	8.4	7.8	520	250	45	45
200	200	8.4	8.4	520	260	49	49
250	80	9.0	7.0	700	235	64	67
250	100	9.0	7.2	700	275	65	68
250	150	9.0	7.8	700	325	69	71
250	200	9.0	8.4	700	325	71	75
250	250	9.0	9.0	700	350	77	81
300	80	9.6	7.0	800	265	83	88
300	100	9.6	7.2	800	300	85	90
300	150	9.6	7.8	800	350	90	95
300	200	9.6	8.4	800	350	95	100
300	250	9.6	9.0	800	350	103	108
300	300	9.6	9.6	800	400	110	115
350	80	10.2	7.0	850	295	107	115
350	100	10.2	7.2	850	325	110	118
350	150	10.2	7.8	850	325	113	122
350	200	10.2	8.4	850	325	116	125

NOTE : Also available in K-14 as per ISO-2531/BS-EN-545



Fittings

UNITECH All Flanged Tee

TABLE - 35 Contd.

Nominal Diameter		e	e ₁	L	H	App. Mass (kg)	
DN	dn					PN 10	PN 16
350	250	10.2	9.0	850	325	133	138
350	300	10.2	9.6	850	425	137	144
350	350	10.2	10.2	850	425	140	150
400	80	10.8	7.0	900	325	135	145
400	100	10.8	7.2	900	350	140	150
400	150	10.8	7.8	900	350	149	158
400	200	10.8	8.4	900	350	145	155
400	250	10.8	9.0	900	350	152	163
400	300	10.8	9.6	900	450	158	170
400	400	10.8	10.8	900	450	170	185
450	80	11.4	7.0	950	355	160	180
450	100	11.4	7.2	950	375	166	185
450	150	11.4	7.8	950	375	168	188
450	200	11.4	8.4	950	375	170	190
450	250	11.4	9.0	950	375	177	197
450	300	11.4	9.6	950	475	184	204
450	400	11.4	10.8	950	475	196	216
450	450	11.4	11.4	950	475	201	230
500	80	12.0	7.0	1000	385	208	238
500	100	12.0	7.2	1000	400	210	240
500	150	12.0	7.8	1000	400	213	243
500	200	12.0	8.4	1000	400	215	245
500	250	12.0	9.0	1000	400	220	250
500	300	12.0	9.6	1000	500	230	260
500	350	12.0	10.2	1000	500	240	270
500	400	12.0	10.8	1000	500	250	280
500	500	12.0	12.0	1000	500	270	300
600	80	13.2	7.0	1100	445	290	340
600	100	13.2	7.2	1100	450	292	342
600	150	13.2	7.8	1100	450	295	345
600	200	13.2	8.4	1100	450	300	355
600	300	13.2	9.6	1100	550	315	370
600	400	13.2	10.8	1100	550	330	390
600	500	13.2	12.0	1100	550	350	420
600	600	13.2	13.2	1100	550	370	440



TABLE - 35 Contd.

Nominal Diameter		e	e ₁	L	H	App. Mass (kg)	
DN	dn					PN 10	PN 16
700	100	14.4	7.2	540	510	245	270
700	150	14.4	7.8	600	520	265	290
700	200	14.4	8.4	650	525	280	305
700	300	14.4	9.6	760	540	315	340
700	400	14.4	10.8	870	555	350	375
700	500	14.4	12.0	1000	570	405	435
700	600	14.4	13.2	1200	585	475	515
700	700	14.4	14.4	1200	600	505	545
750	100	15.0	7.2	550	540	270	300
750	150	15.0	7.8	610	550	280	310
750	200	15.0	8.4	670	555	287	317
750	300	15.0	9.6	780	570	349	384
750	400	15.0	10.8	890	585	359	394
750	500	15.0	12.0	1020	600	485	530
750	600	15.0	13.2	1130	615	500	545
750	700	15.0	14.4	1250	630	515	560
750	750	15.0	15.0	1275	640	525	570
800	100	15.6	7.2	560	570	350	375
800	150	15.6	7.8	620	580	355	380
800	200	15.6	8.4	690	585	360	385
800	300	15.6	9.6	800	600	413	443
800	400	15.6	10.8	910	615	440	480
800	500	15.6	12.0	1030	630	546	590
800	600	15.6	13.2	1350	645	610	650
800	700	15.6	14.4	1350	660	659	709
800	800	15.6	15.6	1350	675	660	700
900	150	16.8	7.8	650	640	390	430
900	200	16.8	8.4	730	645	400	440
900	400	16.8	10.8	950	675	510	560
900	600	16.8	13.2	1500	705	730	800
900	800	16.8	15.6	1500	735	830	890
900	900	16.8	16.8	1500	750	840	900
1000	150	18.0	7.8	720	700	505	565
1000	200	18.0	8.4	770	705	510	570
1000	400	18.0	10.8	990	735	670	730
1000	600	18.0	13.2	1650	765	970	1050
1000	800	18.0	15.6	1650	795	1050	1130
1000	1000	18.0	18.0	1650	825	1100	1200

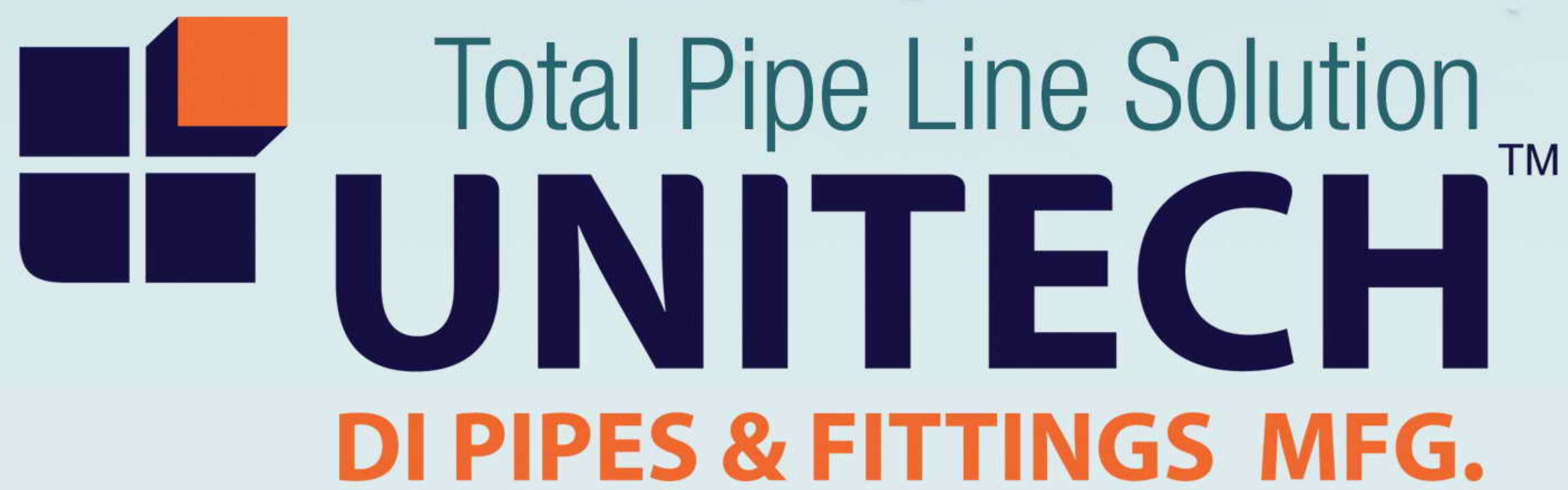


TABLE - 35 Contd.

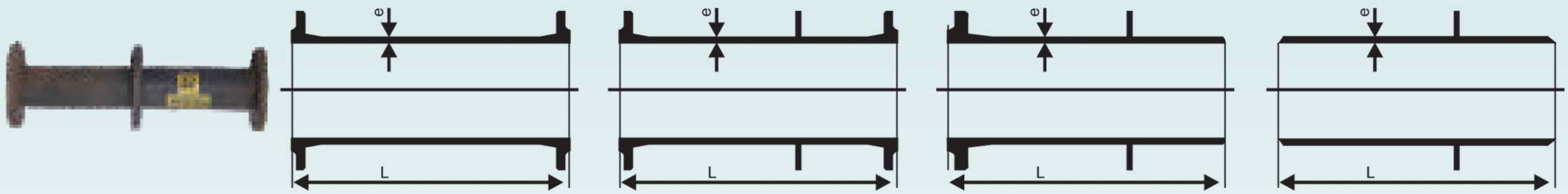
Nominal Diameter		e	e ₁	L	H	App. Mass (kg)	
DN	dn					PN 10	PN 16
1100	200	19.2	8.4	760	765	650	720
1100	400	19.2	10.8	980	795	770	860
1100	600	19.2	13.2	1210	825	940	1030
1100	800	19.2	15.6	1470	855	1140	1225
1100	1000	19.2	18.0	1690	885	1345	1450
1100	1100	19.2	19.2	1800	900	1450	1555
1200	200	20.4	8.4	780	825	800	900
1200	400	20.4	10.8	1070	855	990	1110
1200	600	20.4	13.2	1240	885	1100	1220
1200	800	20.4	15.6	1470	915	1300	1420
1200	1000	20.4	18.0	1700	945	1500	1650
1200	1200	20.4	20.4	1950	975	1790	1950
1400	400	22.8	10.8	1050	950	1240	1380
1400	600	22.8	13.2	1550	980	1527	1665
1400	800	22.8	15.6	1760	1010	1755	1884
1400	1000	22.8	18.0	2015	1040	1995	2143
1400	1200	22.8	20.4	2015	1070	2262	2431
1400	1400	22.8	22.8	2200	1100	2545	2715
1500	400	24.0	10.8	1070	1005	1525	1730
1500	600	24.0	13.2	1350	1035	1700	1900
1500	800	24.0	15.6	1570	1065	1900	2100
1500	1000	24.0	18.0	1790	1095	2200	2400
1500	1200	24.0	20.4	2010	1125	2500	2700
1500	1400	24.0	22.8	2230	1155	2750	2980
1500	1500	24.0	24.0	2340	1170	2900	3130
1600	400	25.2	10.8	1100	1060	1700	1900
1600	600	25.2	13.2	1600	1090	2000	2200
1600	800	25.2	15.6	1835	1120	2300	2500
1600	1000	25.2	18.0	2065	1150	2500	2700
1600	1200	25.2	20.4	2300	1180	2800	3000
1600	1400	25.2	22.8	2300	1210	3208	3444
1600	1600	25.2	25.2	2480	1240	3586	3854
1800	600	27.6	13.2	1440	1200	2521	2768
1800	800	27.6	15.6	1660	1230	2848	3087
1800	1000	27.6	18.0	1880	1260	3184	3442
1800	1200	27.6	20.4	2100	1290	3543	3822
1800	1400	27.6	22.8	2320	1320	3910	4190
1800	1600	27.6	25.2	2540	1350	4328	4641
1800	1800	27.6	27.6	2760	1380	4750	5086

NOTE : 1. Sizes & Dimensions in **RED** are non standard as per IS-9523-2000
 2. Tees in combination of sizes other than above can also be manufactured against specific requirement.





Special



Double Flanged Pipe

Double Flanged Puddle Pipe

Flanged Spigot Puddle Pipe

Plain End Puddle Pipe

K - 12

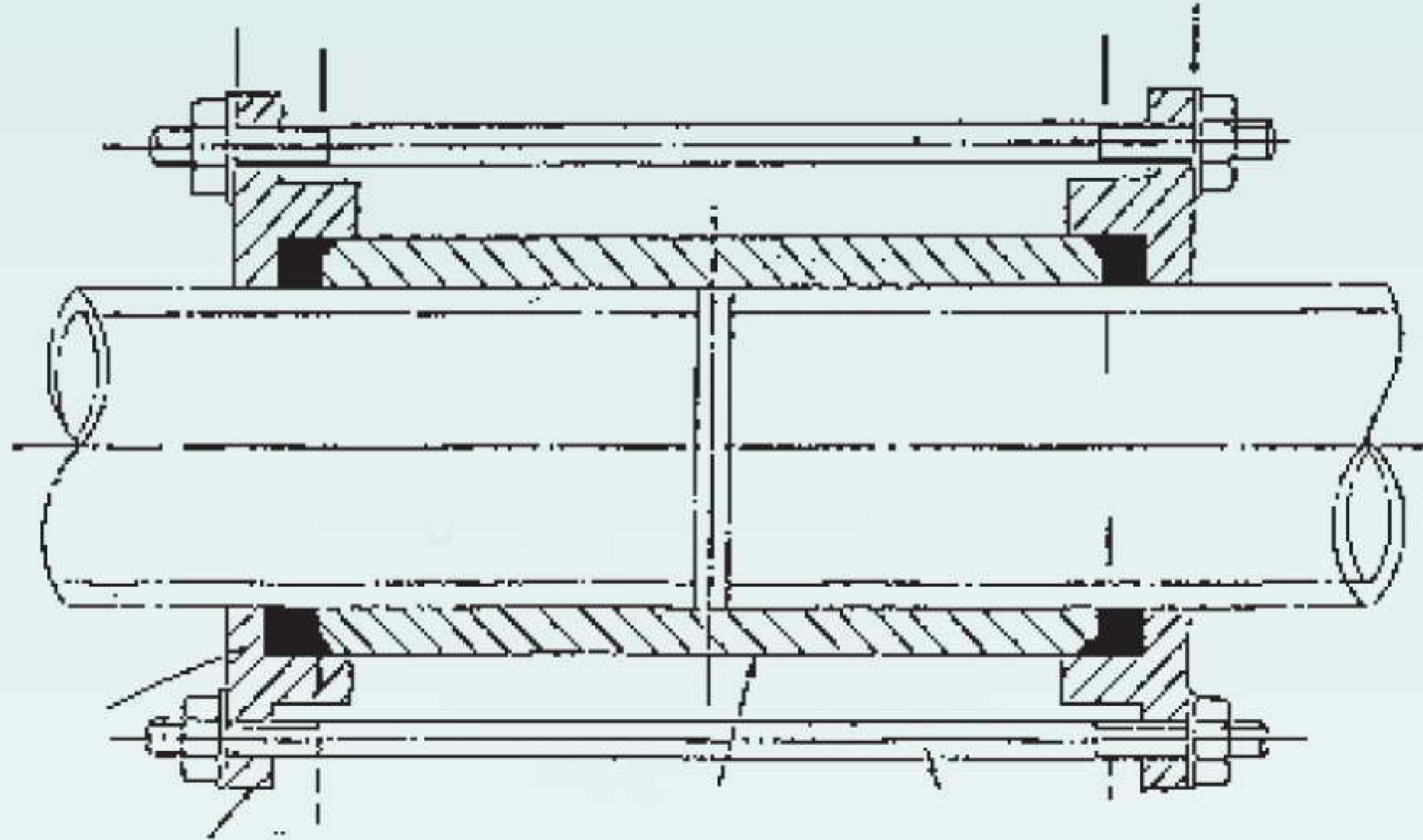
TABLE - 36

Nominal Size (DN)	Barrel		Integral Flange		App. Mass (kg)			
	e mm	Mass per Meter Kg/m	Unit Mass Per Flg		D/F Pipes PN-10 Flanges		D/F PuddlePipe PN-10 Flanges	
			PN 10	PN 16	1.0 mtr.	2.0 mtr.	0.5 mtr	1.0 mtr
80	7.0	14.1	3.0	3.0	20	34	16	23
100	7.2	17.7	3.3	3.3	24	42	19	28
125	7.5	22.7	4.0	4.0	31	53	23	35
150	7.8	28.0	5.1	5.1	38	66	29	43
200	8.4	39.7	7.1	7.1	53	93	41	61
250	9.0	52.8	10.0	10.0	72	125	56	83
300	9.6	67.3	13.0	13.0	93	160	73	106
350	10.2	83.1	14.7	17.4	111	194	86	127
400	10.8	100.0	17.7	22.2	133	233	103	153
450	11.4	118.3	20.2	28.0	159	277	120	179
500	12.0	138.2	24.3	38.0	182	320	141	210
600	13.2	181.8	34.0	48.0	243	425	193	284
700	14.4	230.8	46.0	58.0	312	543	253	369
750	15.0	258.0	55.0	68.0	354	612	294	423
800	15.6	285.5	62.0	77.0	395	681	329	472
900	16.8	345.4	73.0	92.0	474	819	392	565
1000	18.0	410.6	93.0	128.0	573	984	484	690
1100	19.2	482.0	113.0	148.0	707	1189	580	821
1200	20.4	558.0	138.0	193.0	800	1357	693	972
1400	22.8	727.0	175.0	232.0	1022	1749	888	1252
1500	24.0	820.0	202.0	290.0	1222	2041	1016	1425
1600	25.2	917.0	242.0	331.0	1330	2247	1184	1643
1800	27.6	1130.0	282.0	394.0	1602	2731	1411	1975
2000	30.4	1880.0	337.0	475.0	2554	4434	1951	2891
2200	32.4	2220.0	426.0	600.0	3072	5292	2388	3498

NOTE :

1. Puddle Flange will be 10mm thick upto 300 mm dia, 15 mm from 350 to 600 mm & 20 mm from 700 to 1800 mm dia, unless otherwise specified
2. Pipes can be supplied with Flanged ends, Plain ends, Flange Spigot ends and with puddles flanges in all combination and in all length with max limit being 2.0 mtrs.

MECHANICAL COUPLING



End Connection

To join two similar plain ends only.

Use

- i) With CI & DI pipes
- ii) can be manufactured specially to suit all other kinds of pipes such as AC, PVC, uPVC, MS, SS etc.

Working

Tightening of bolts draws the two flanges together compressing the sealing ring in the recess between sleeve and flanges on to the pipe thus effecting a leak tight joint.

Size 80mm to 1800mm NB.

Material Used Ductile Iron

Advantages

It can absorb limited expansion, contraction, ground movement and long radius curves.

End Connection

To join one plain end and other flanged end only.

Use

- i) with CI & DI pipes
- ii) can be manufactured specially to suit all other kinds of pipes such as AC, PVC, uPVC, MS, SS etc.

Working

Tightening of bolts draws compression flange towards spigot end of flanged barrel thereby compressing the sealing rubber ring in the recess between compression flange and the spigot end of flange barrel effecting a leak tight joint.

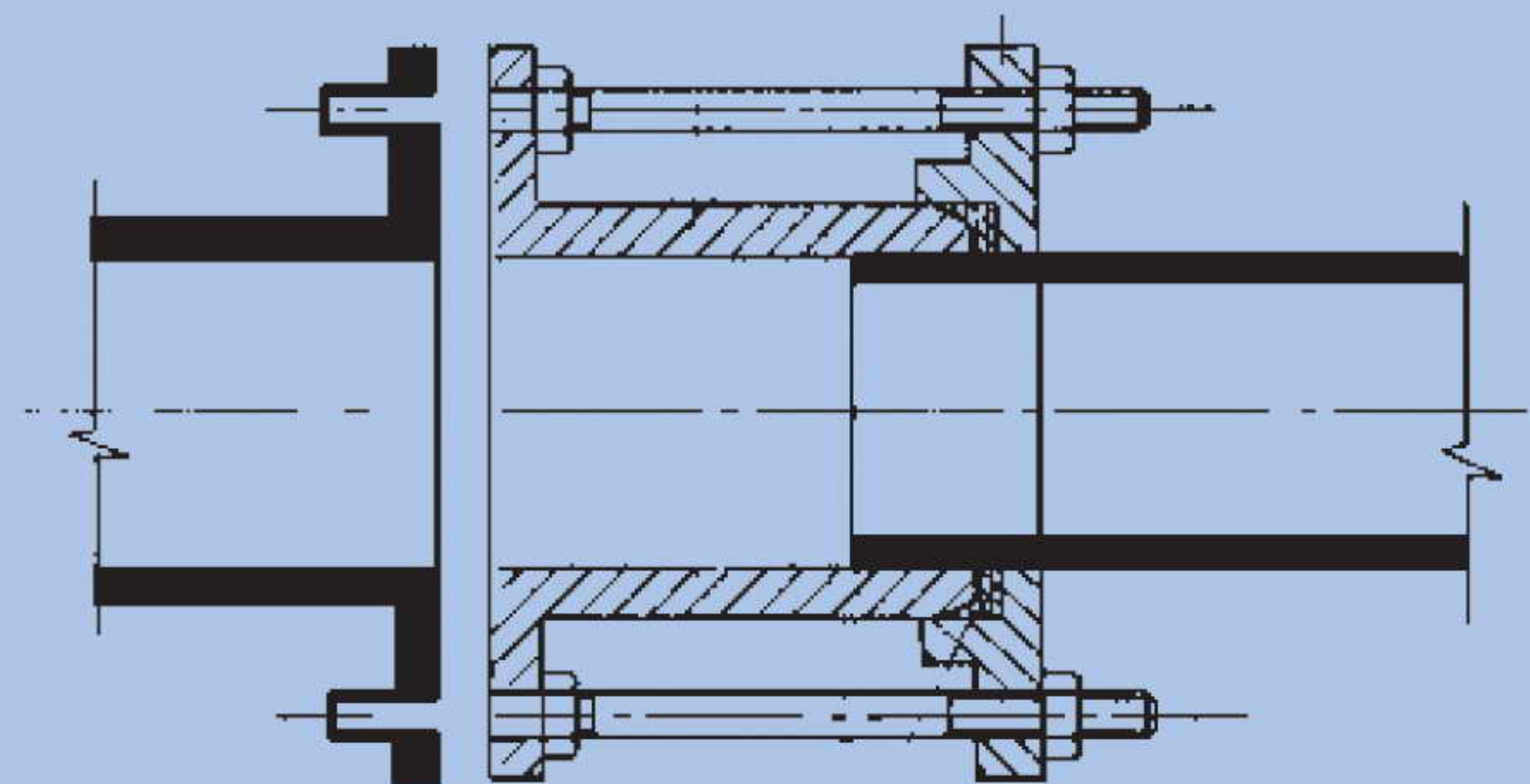
Size 80mm to 1800mm NB.

Material Used Ductile Iron

Advantages

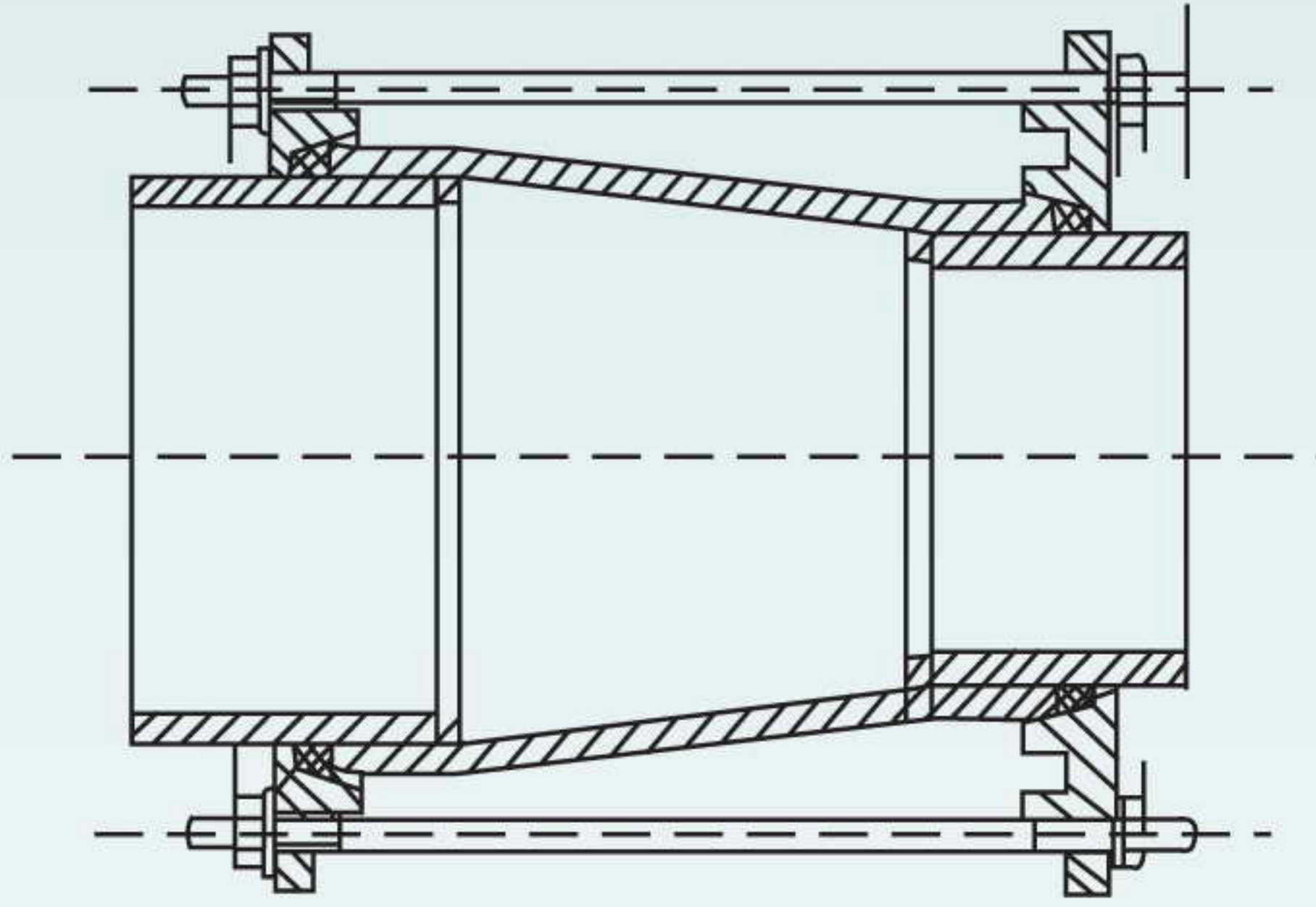
It can absorb limited expansion, contraction, ground movement and long radius curves.

FLANGED MECHANICAL ADAPTERS





REDUCING MECHANICAL COUPLING



End Connection

To join two dis-similar plain ends having different outside diameters.

Use

with CI, DI, AC, PVC, uPVC, MS, S.S, etc virtually all kinds of rigid pipes.

Working

Tightening of bolts draws the two flanges together compressing the seal ring in the recess between sleeve and flanges on to the pipe thus effecting a leak tight joint.

Size 80mm to 1800mm NB.

Material Used Ductile Iron

Advantages

It can absorb limited expansion, contraction, ground movement and long radius curves.

End Connection

To join two flanged end.

Use

- i) with all kinds of pipes but having flanged ends.
- ii) can be manufactured specially to suit all other kinds of pipes such as AC, PVC, uPVC, MS, SS etc.

Working

A flanged spigot of same nominal bore as that of adjoining pipeline slides inside a flanged spigot barrel of higher diameter to create space in the pipeline upto a maximum of 0 to 100 mm.

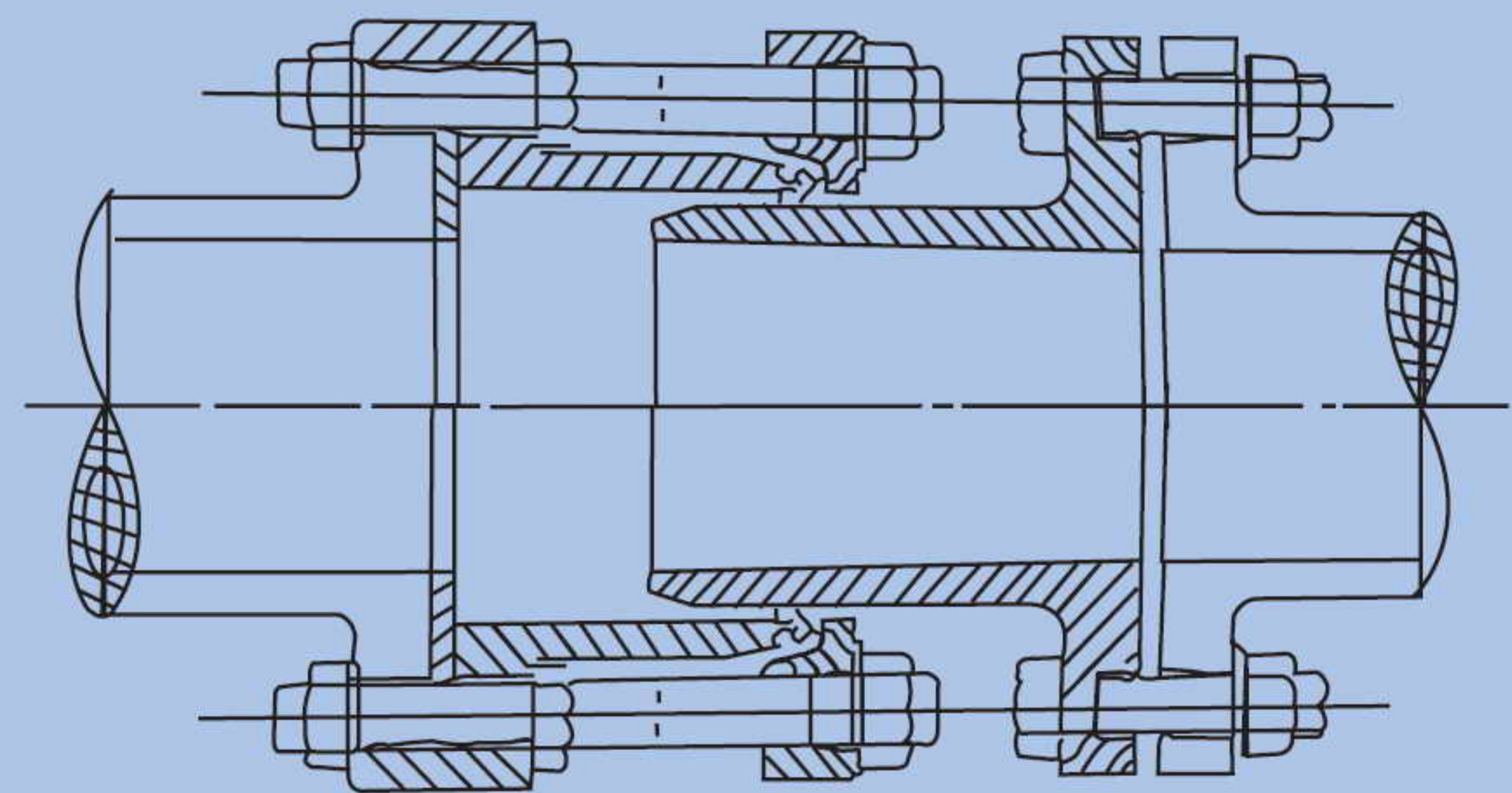
Size 80mm to 1800mm NB.

Material Used Ductile Iron

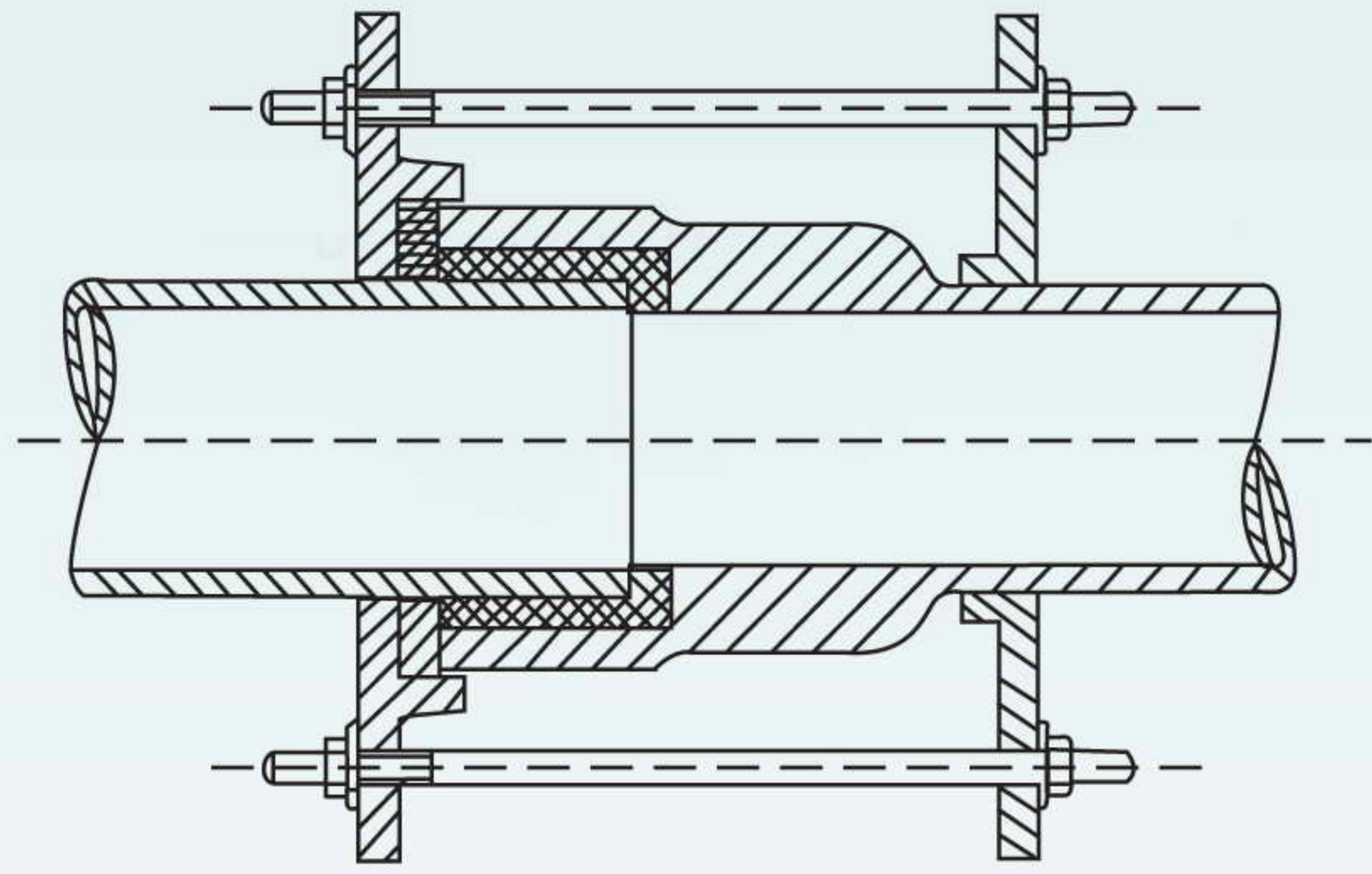
Advantages

- i) to create gaps/space in flanged pipeline.
- ii) to fill up/adjust gaps/space in flanged pipelines
- iii) can absorb limited vibration/expansion contraction

ADJUSTABLE DISMANTLE JOINTS



SOCKET LEAK REPAIR JOINT CLAMPS



End Connection

To seal the leaking socket joints/ends of pipes having Tyton Rubber Ring Joints or lead caulked Joints.

Use

CI DI socket end pipes (Lead or Tyton Rubber Joints)

Working

Compression Ring, Clamp and Rubber rings are supplied in two parts to be joined with nut bolt and J-hook. The compression Ring is pulled towards socket thereby sealing the gap inbetween the socket and Compression Ring with the help of rubber ring on to the pipe.

Size 80mm to 1800mm

Material Used Ductile Iron

Advantages

Leaking socket ends on Running pipeline can be repaired by digging trenches only near the socket ends.

End Connection

Double flanged end.

Use

To be used as an automatic expansion/contraction absorbing joints between flanged end connections. It can be used on all Rigid pipes like CI, DI, MS, PVC, uPVC, SS but with flanged ends.

Working

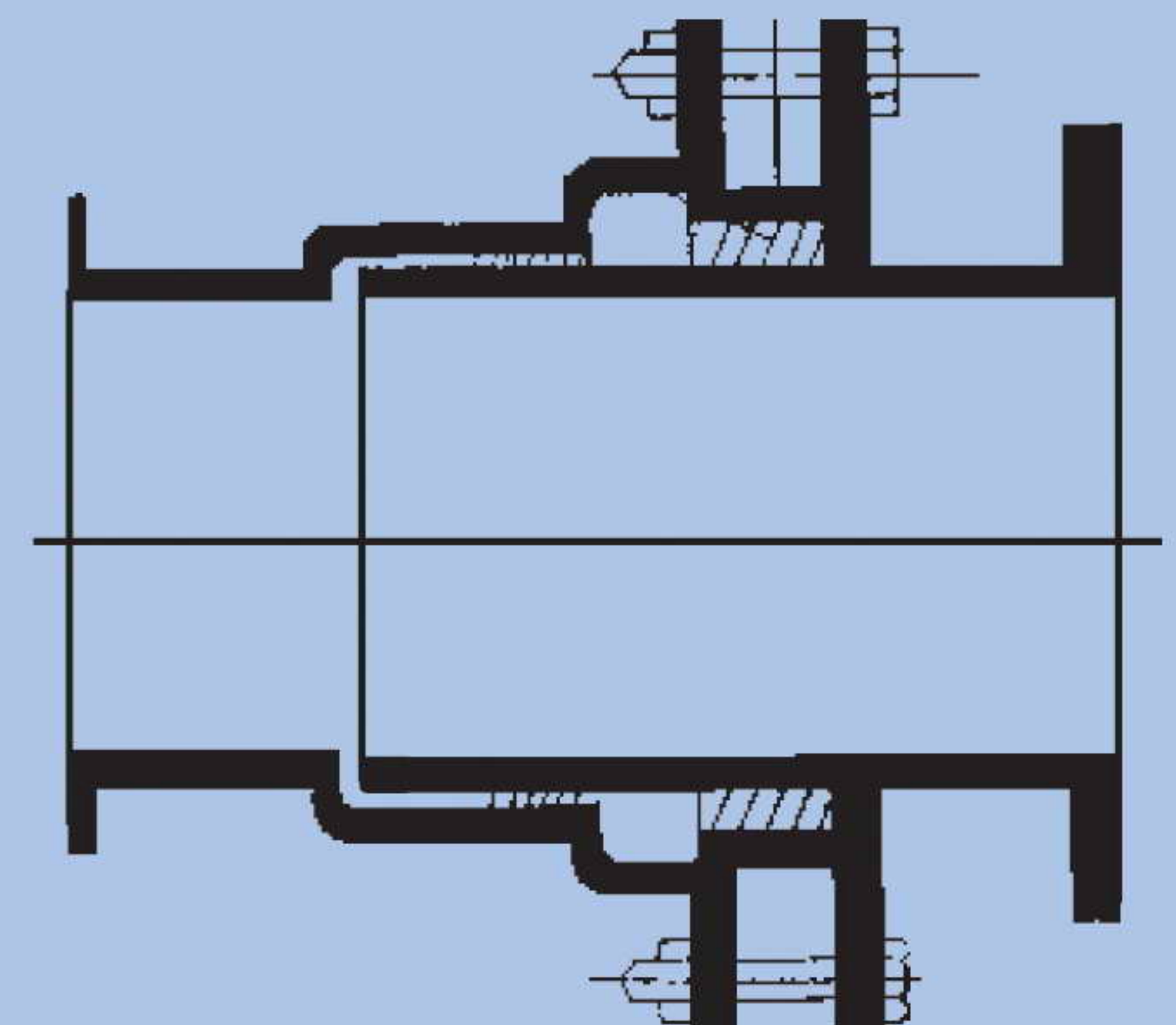
Size 80mm to 1800mm

Material Used Ductile Iron

Advantages

Automatically absorbs expansion/contraction in pipeline thereby prolonging the lifespan of pipeline and reducing chances of bending / zig zag lines.

EXPANSION JOINTS



End Connection

For branch connection of screwed end in small dia of 15 to 65 mm.

Use On C.I./D.I./M.S./U.P.V./P.V.C/A.C/S.S Pipe etc.

Working

Saddle piece is supplied in two parts bolted together. The bottom half has rubber pad for support only. The top half has screwed outlet at the top. It's base has a round flat rubber gasket pasted with a hole drilled in the centre, to seal the opening. This top half sits on the drilled hole of equal diameter on main pipe. When the end flange nut bolts are tightened the pasted rubber pad tightens towards the main pipes barrel O.D. to seal the opening.

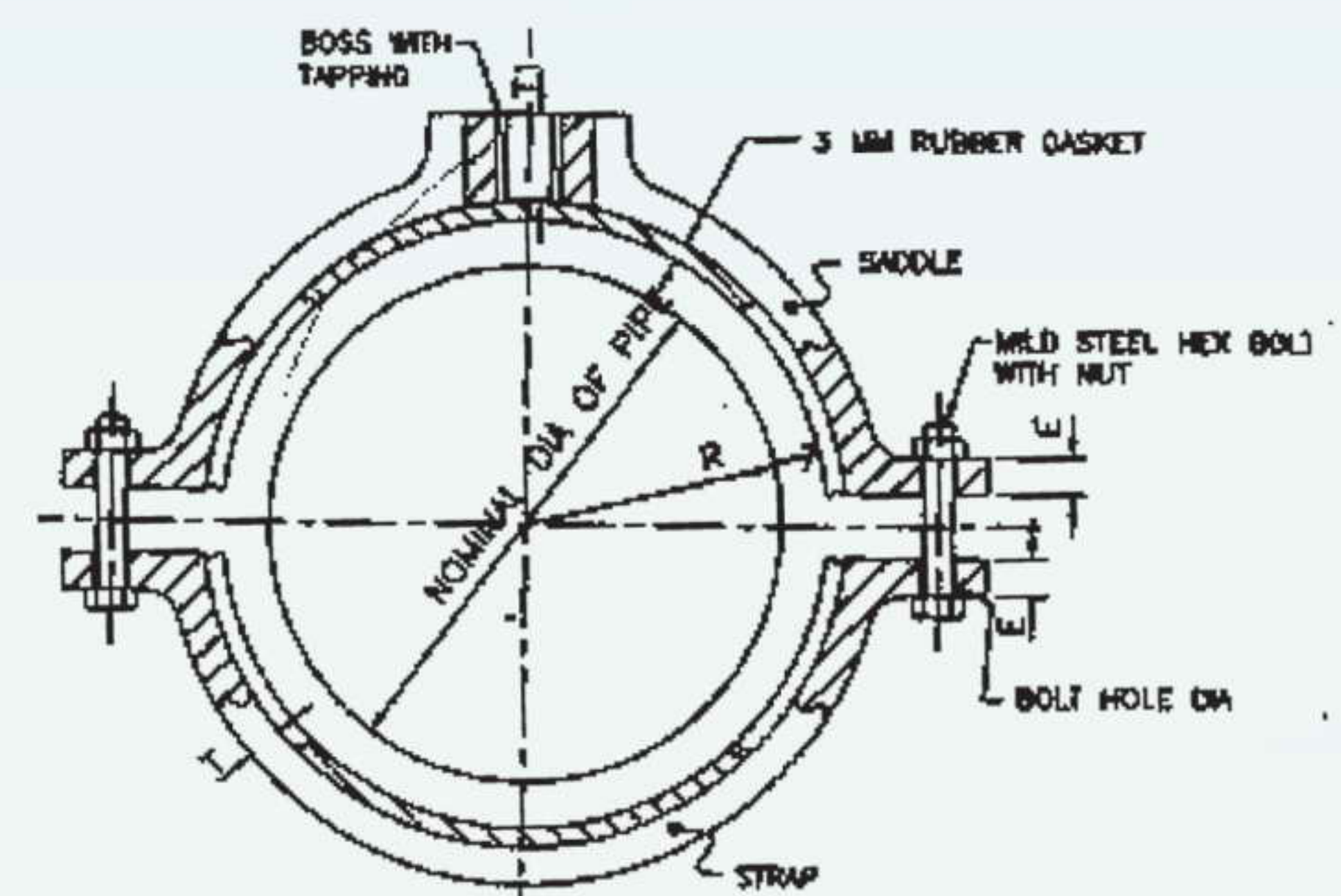
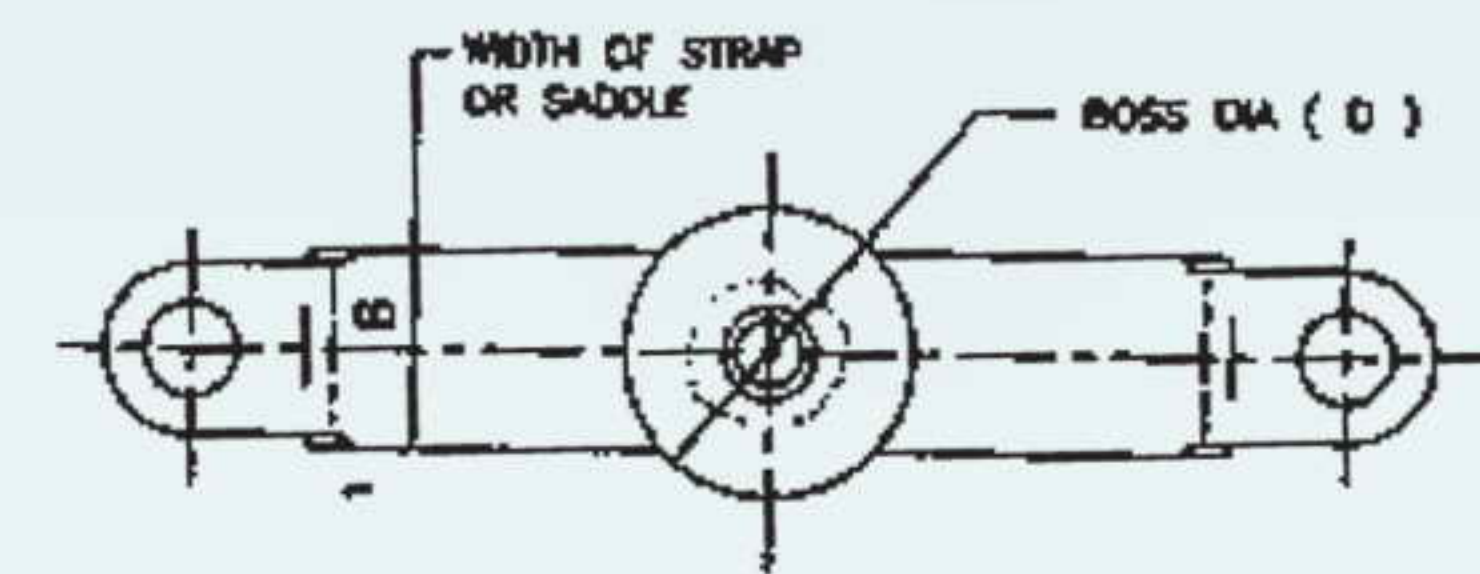
Size Main Pipes : 50 mm to 2000 mm dia
Outlet (Screwed) : 15 mm to 65 mm dia

Material Used Ductile Iron / M.S. Zinc metallised / Stainless Steel

Advantages

A threaded branch connection for fitting an air valve, pressure gauge, meters or branch pipe connection can be taken out from an existing, laid out pipe line without disturbing the main pipe line. A hole of required diameter is drilled by portable drill at site on the pipe & the Saddle piece simply sits on the hole & end nut bolts tightend.

SADDLE PIECES - SCREWED END



End Connection

For branch connection of flanged end in dia of 25 to 200 mm

Use On C.I./D.I./M.S./U.P.V.C/A.C/S.S Pipe etc.

Working

Saddle piece is supplied in two parts bolted together. The bottom half has rubber pad for support only. The top half has flanged outlet at the top. It's base has a round flat rubber gasket pasted with a hole drilled in the centre, to seal the opening. This top half sits on the drilled hole of equal diameter on main pipe. When the end flange nut bolts are tightened the pasted rubber pad tightens towards the main pipe barrel O.D to seal the opening.

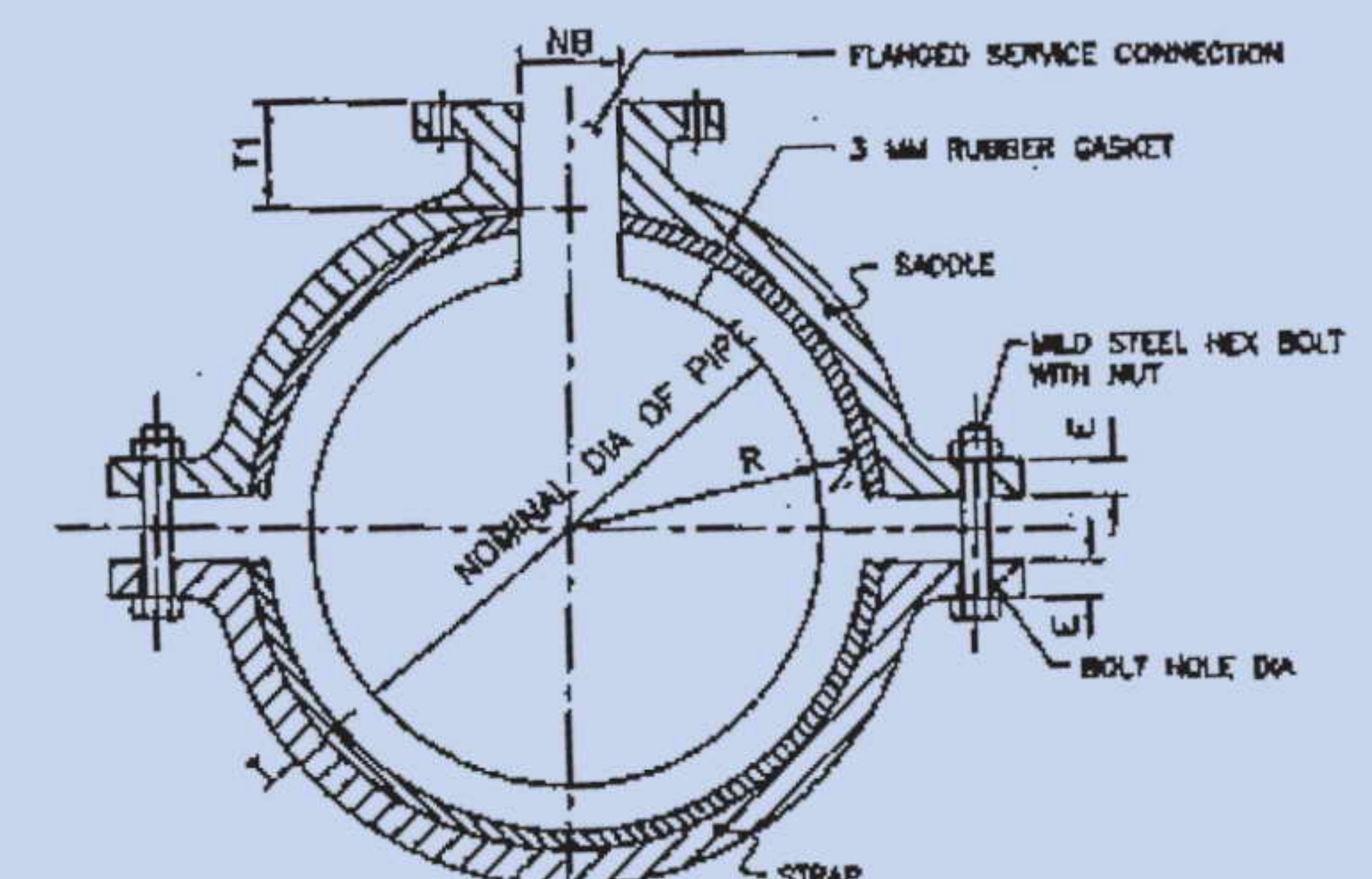
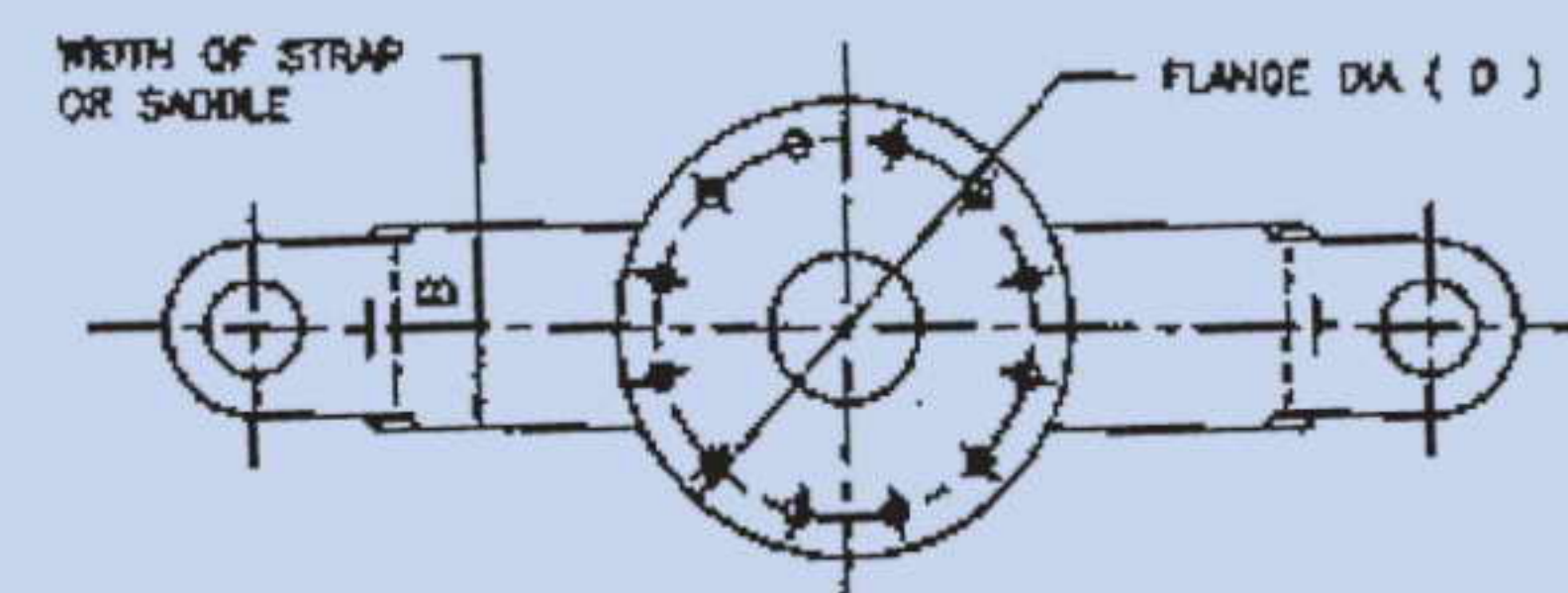
Size Main Pipes : 50 mm to 2000 mm dia
Outlet (Flanged) : 25 mm to 200 mm dia

Material Used Ductile Iron/M.S. Zinc metallised/Stainless Steel.

Advantages

A flanged branch connection for fitting an air valve, pressure gauge, meters or branch pipe connection can be taken out from an existing, laid out pipe line without disturbing the main pipe line. A hole of required diameter is drilled by portable drill at site on the pipe & the Saddle piece simply sits on the hole & end nut bolts tightened.

SADDLE PIECES - FLANGED END



End Connection

To seal small leakages / cracks on pipe body.

Use

CI /DI/MS/AC/PVC/UPVC/SS etc. i.e. Virtually all kinds of Rigid Pipes.

Working

The patch clamp consists of two halves. One half contains three straight patches of rubber for support. The other half contains a rubber pad with a recessed centre to cover the pipe body crack/leak. Tightening the end flange nut bolt tightens the rubber pad on to the crack/leak portion thereby sealing the leak.

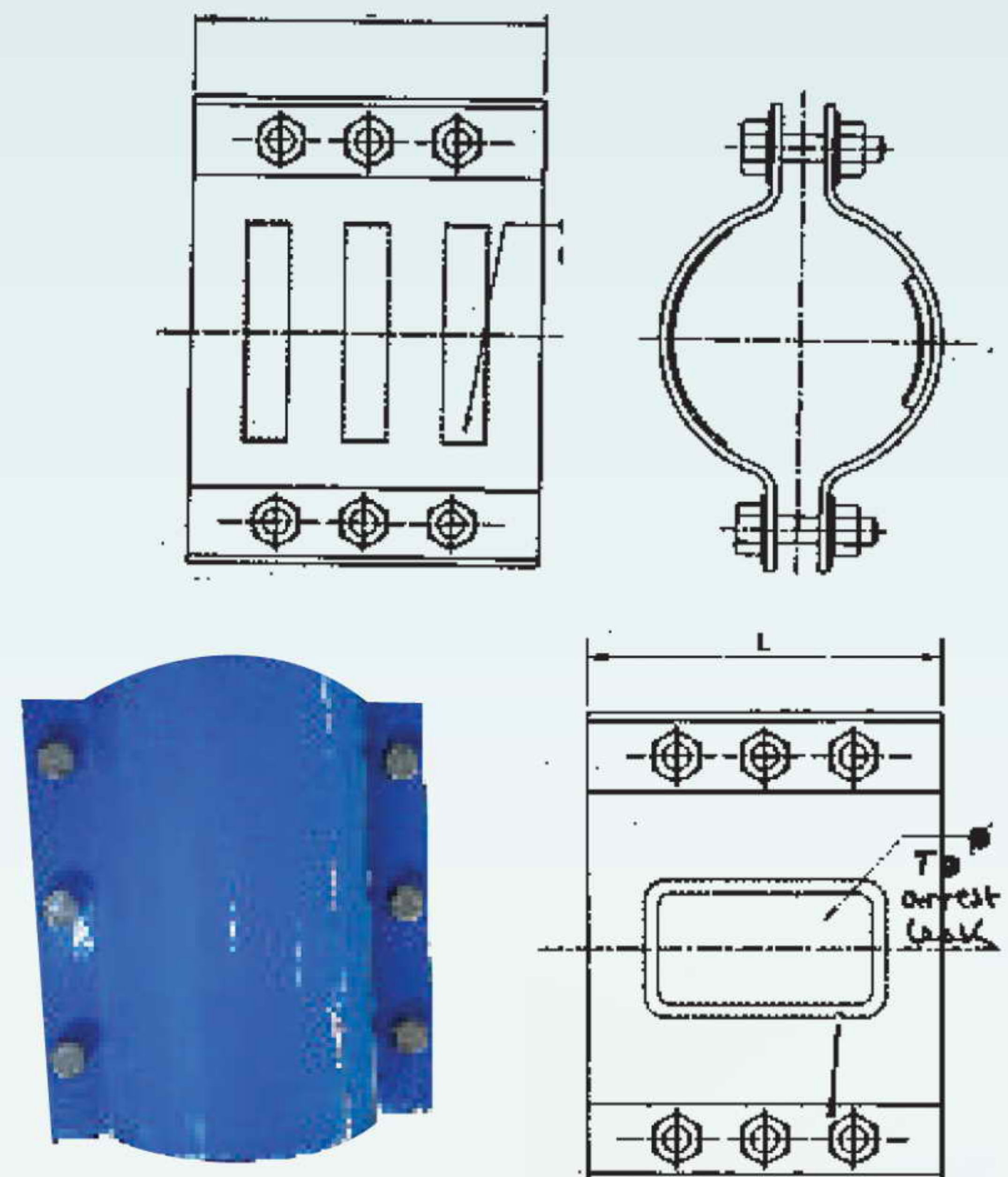
Size 50 mm dia to 2000 mm dia

Material Used Ductile Iron / M.S / S.S

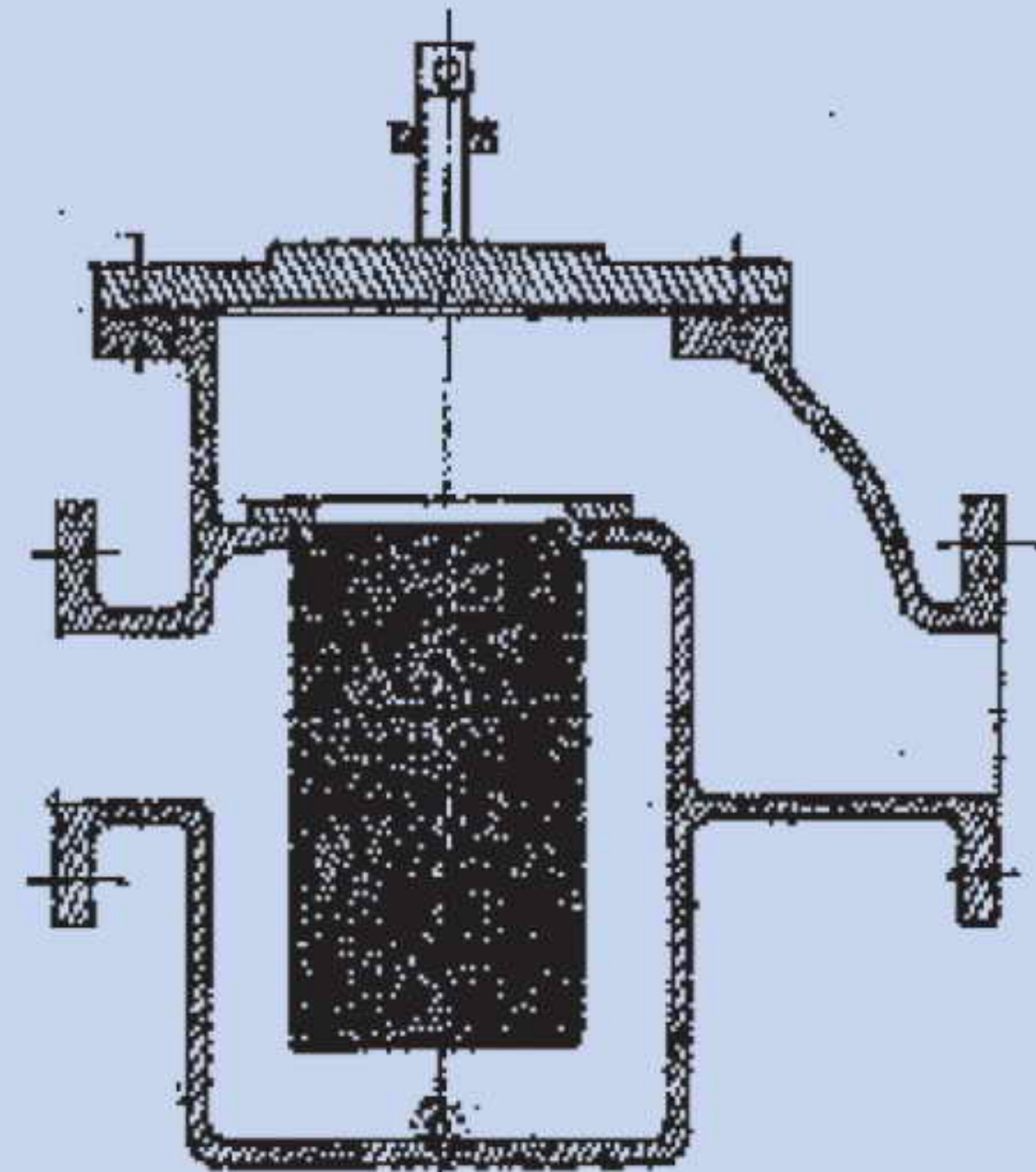
Advantages

Can be used to seal small longitudinal/circumferential cracks/leakages on a running/in use pipeline to arrest leak.

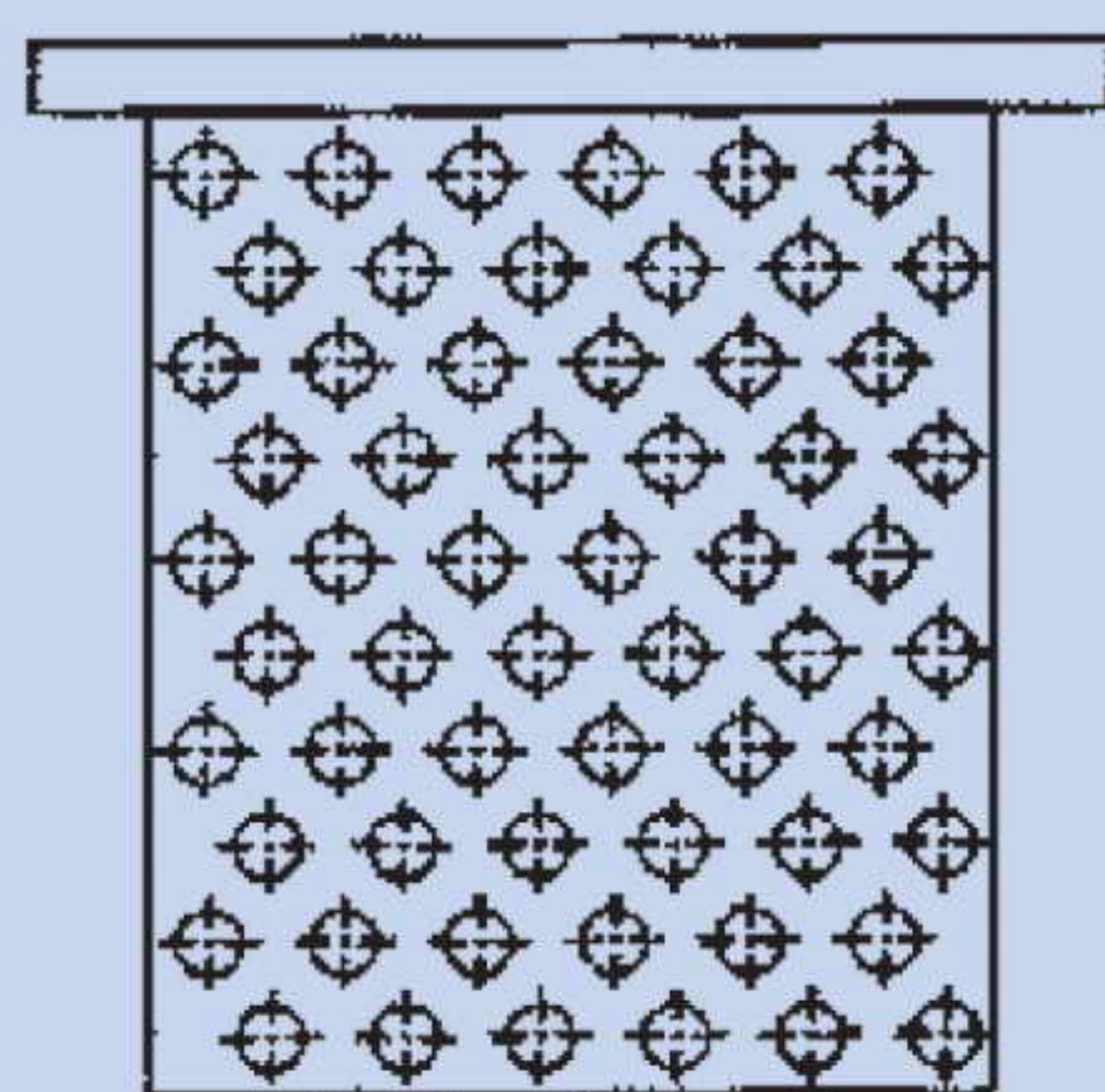
PIPE BODY PATCH CLAMP



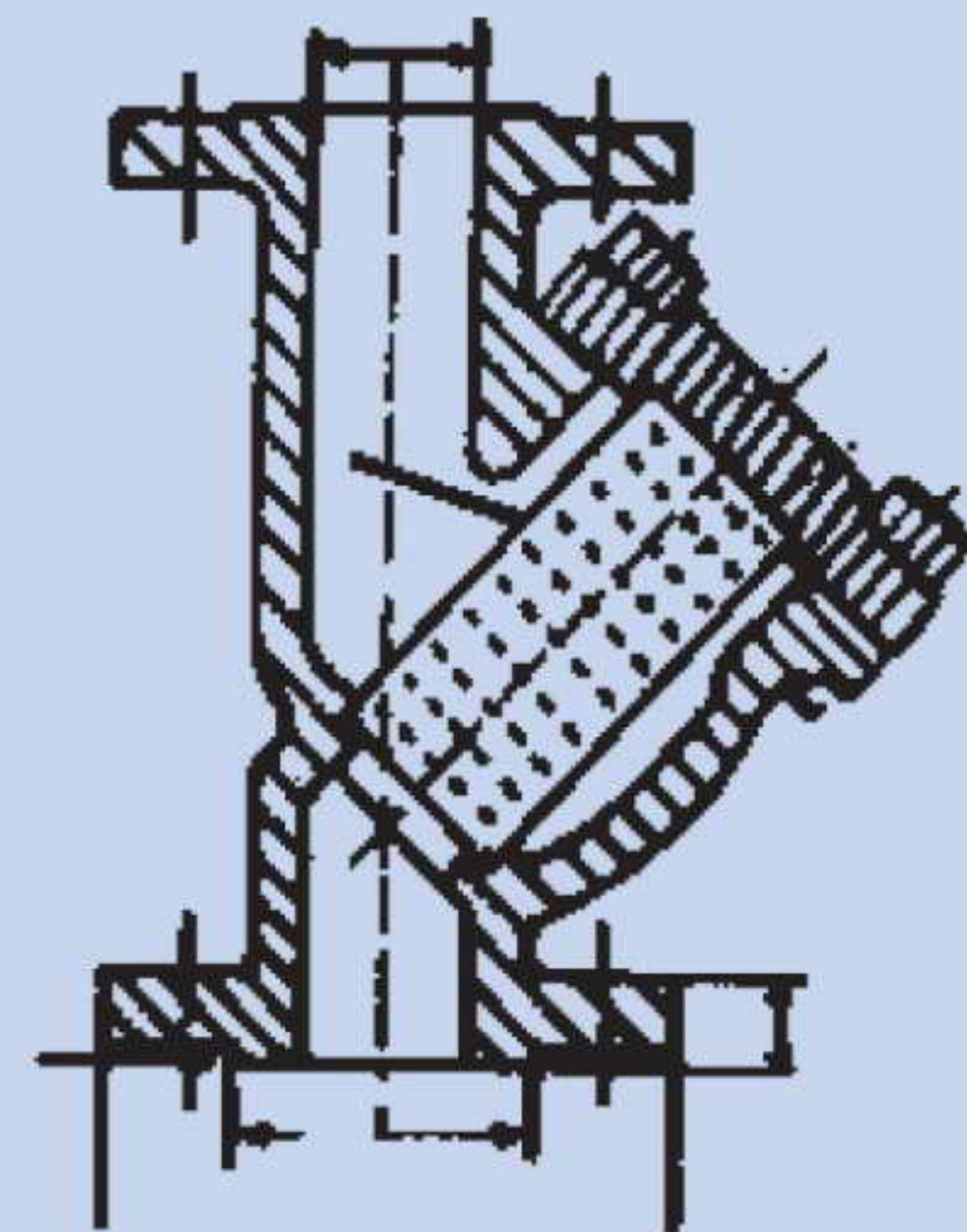
STRAINER



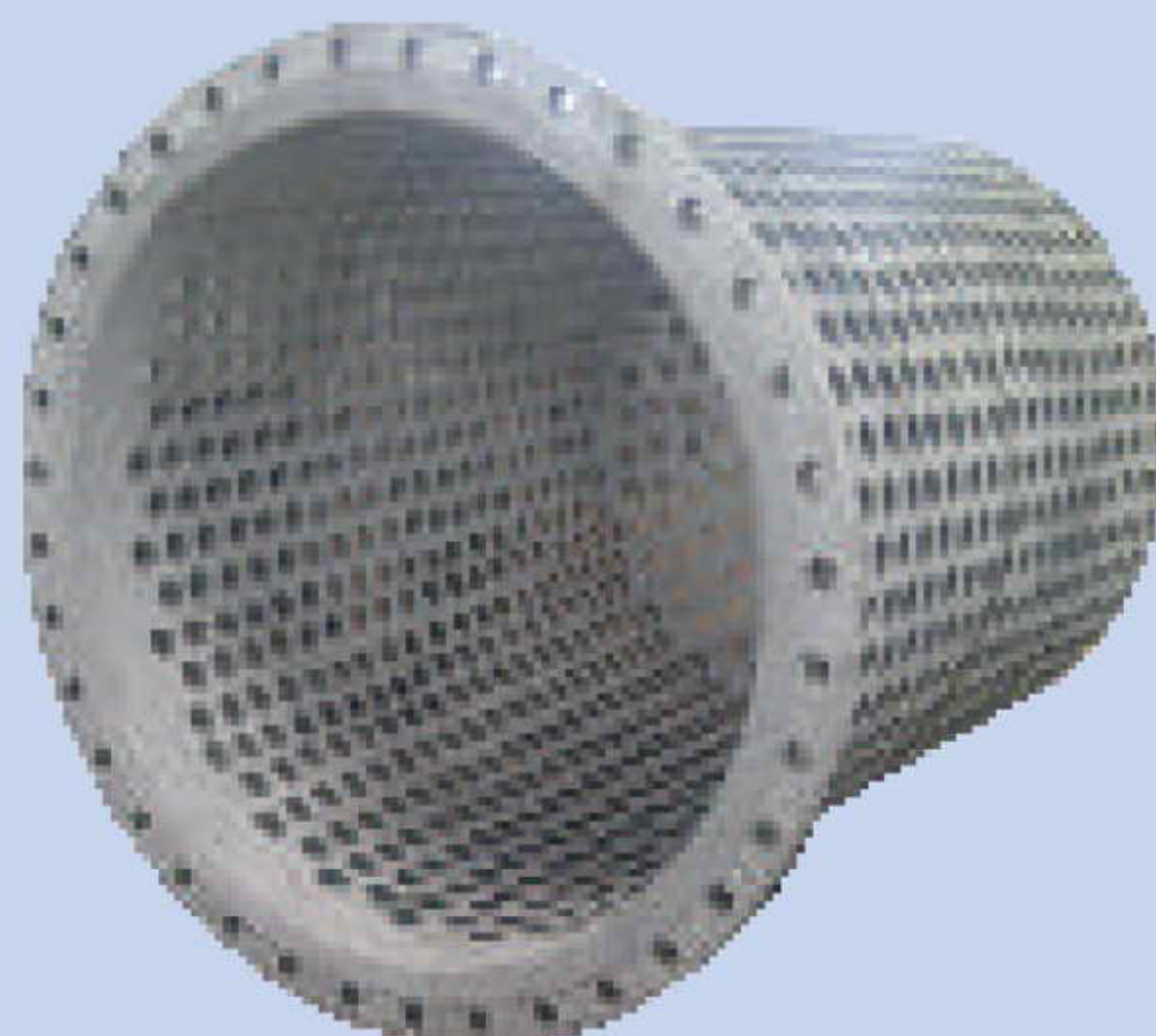
POT STRAINER

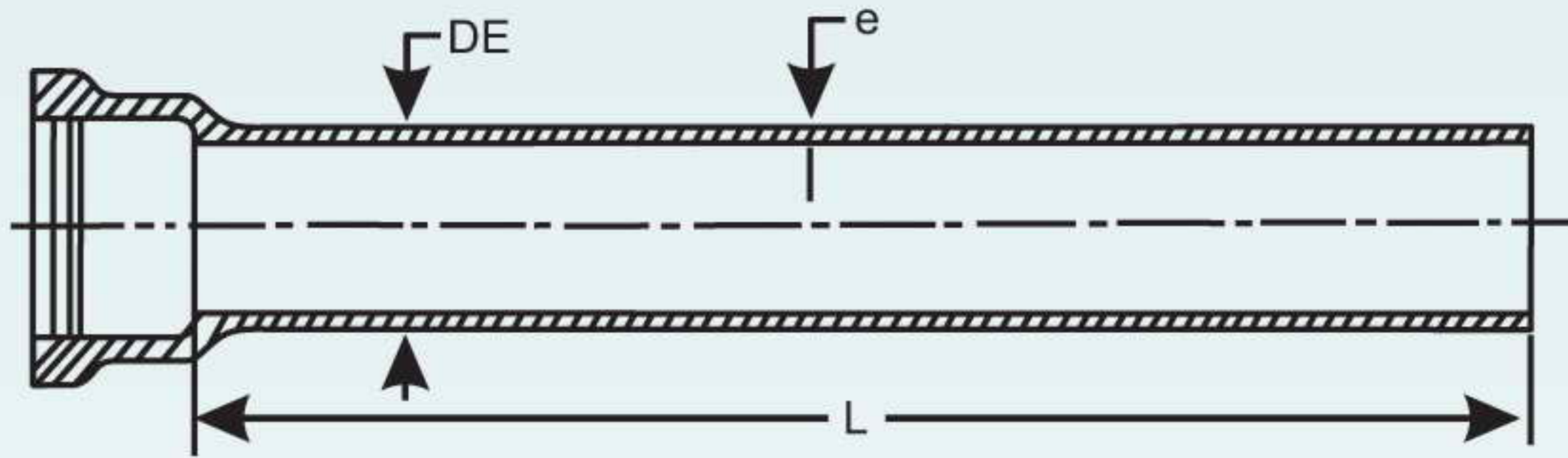


BUCKET STRAINER

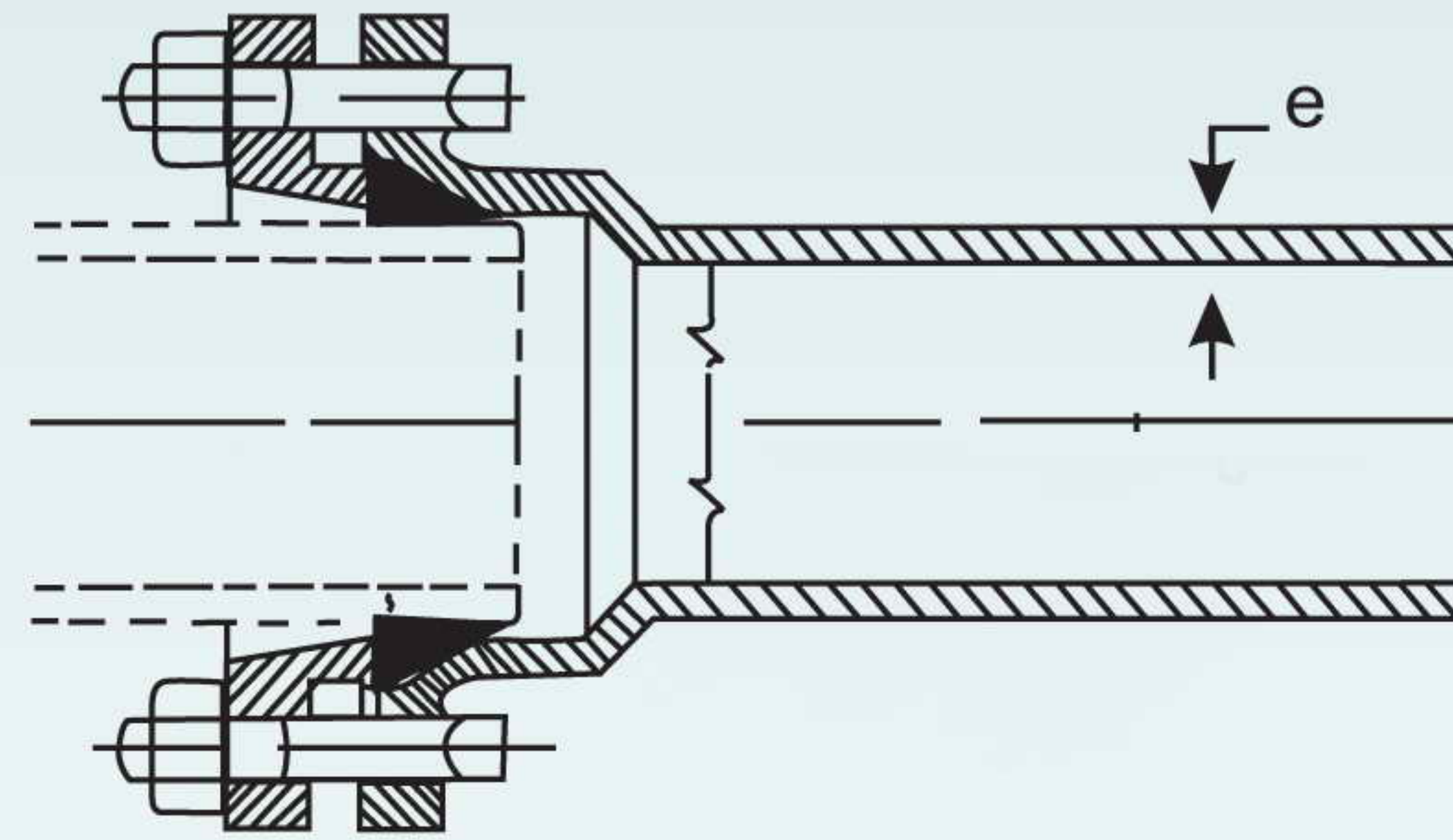


'Y' TYPE STRAINER






Socket Spigot Pipe suitable for Lead / Tyton Joint



Socket Spigot Pipe suitable for Mechanical Joint

SOCKET AND SPIGOT PIPES — CLASS K-12 (10 bar pressure)

Nominal Diameter DN	Barrel DE mm	Socket Mass Approx Kg.	B A R R E L		Total Mass Incl. Socket (L)	
			e	Mass / mtr.	2.0 mtr.	2.5 mtr.
			mm	Kg.	Kg.	Kg.
1100	1152	200	19.2	482	1164	1405
1200	1255	238	20.4	558	1354	1633
1400	1462	280	22.8	727	1734	2098
1500	1565	340	24.0	820	1980	2390
1600	1668	380	25.2	917	2214	2672
1800	1875	490	27.6	1130	2750	3315
2000	2082	626	30.0	1370	3366	4051
2200	2288	784	32.4	1620	4024	4834
2400	2458	966	34.8	1900	4766	5716
2600	2684	1174	37.2	2200	5574	6674



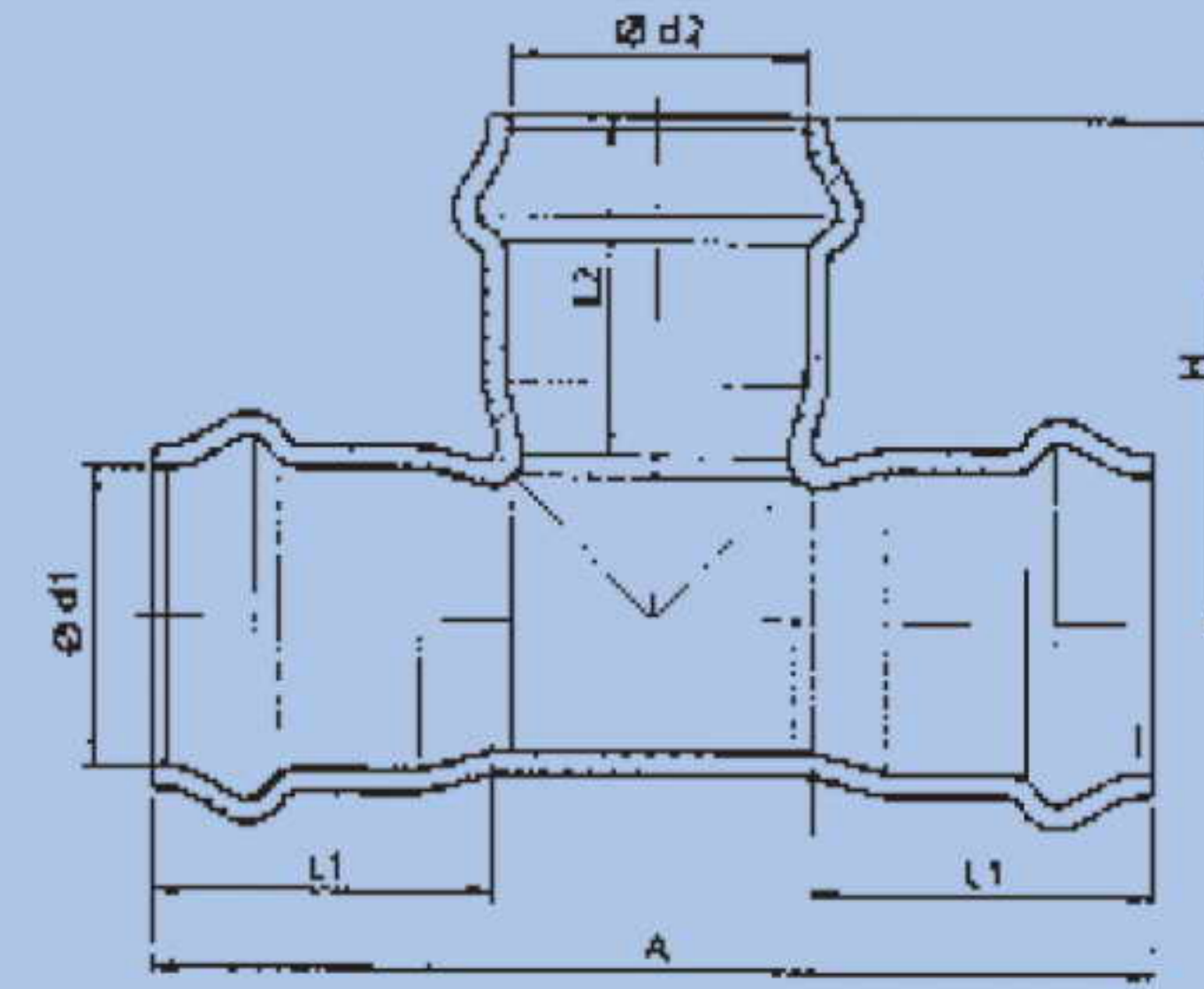
Total Pipe Line Solution
UNITECHTM
DI PIPES & FITTINGS MFG.

Fittings

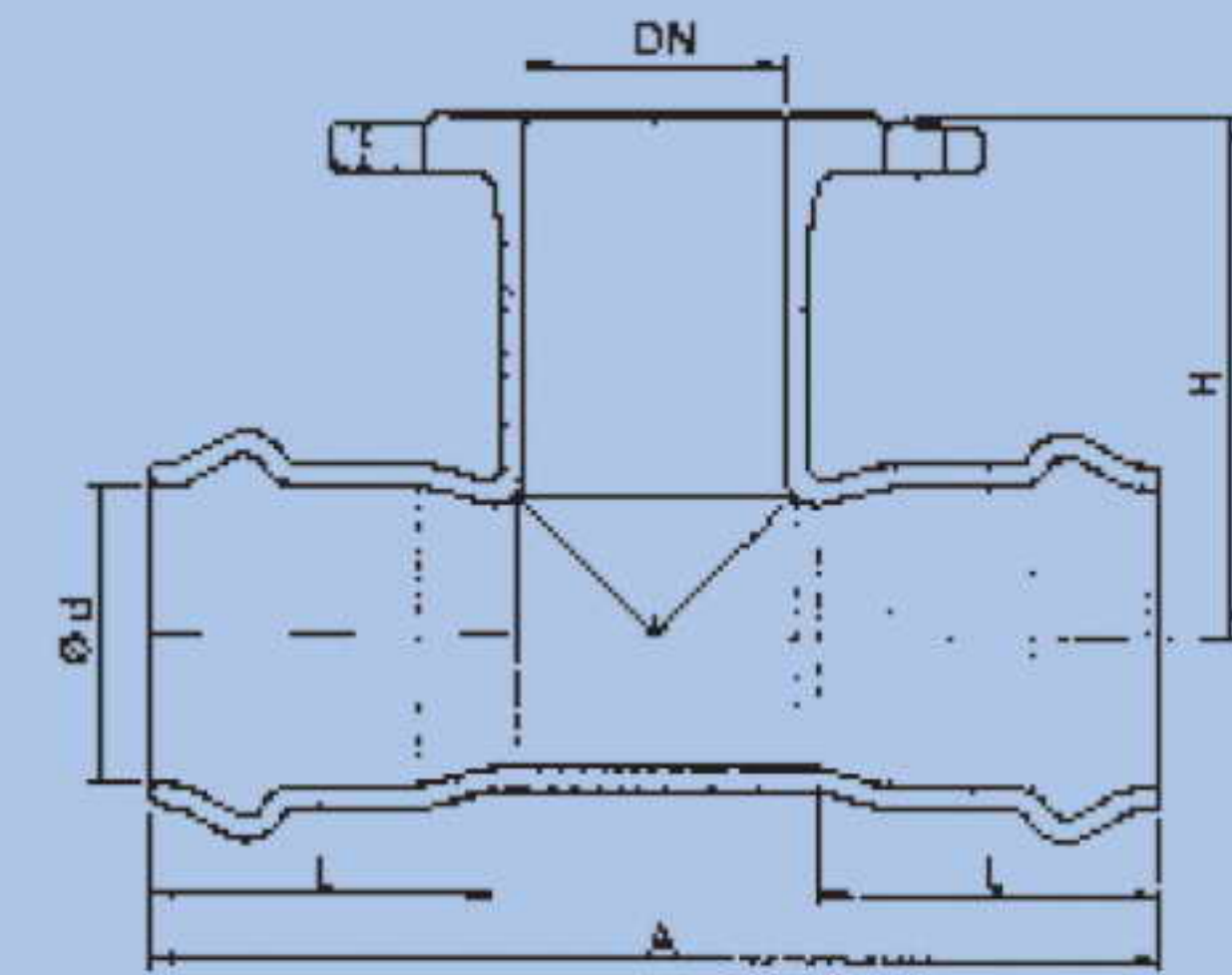
Suitable for uPVC PIPES



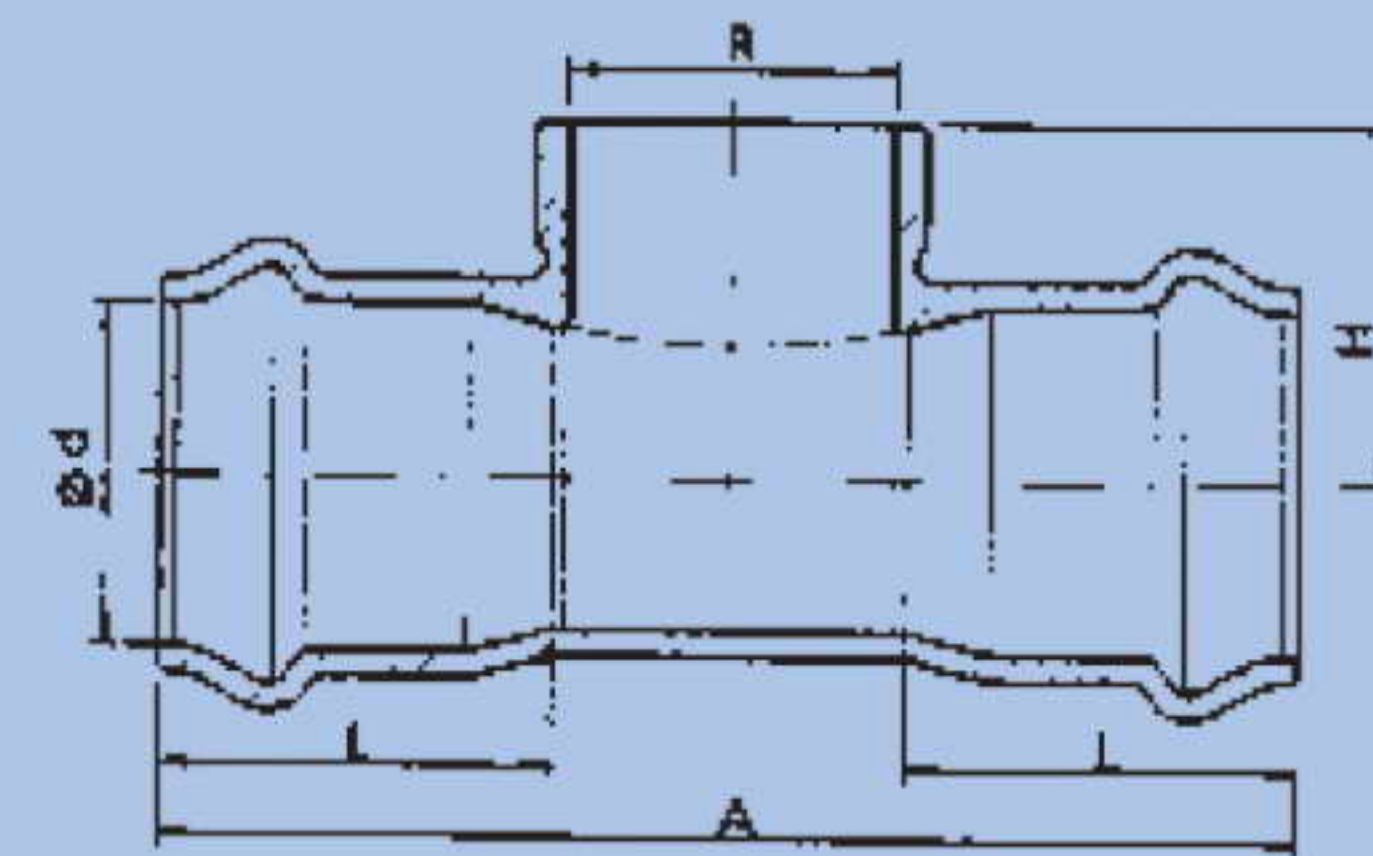
ALL SOCKET TEE



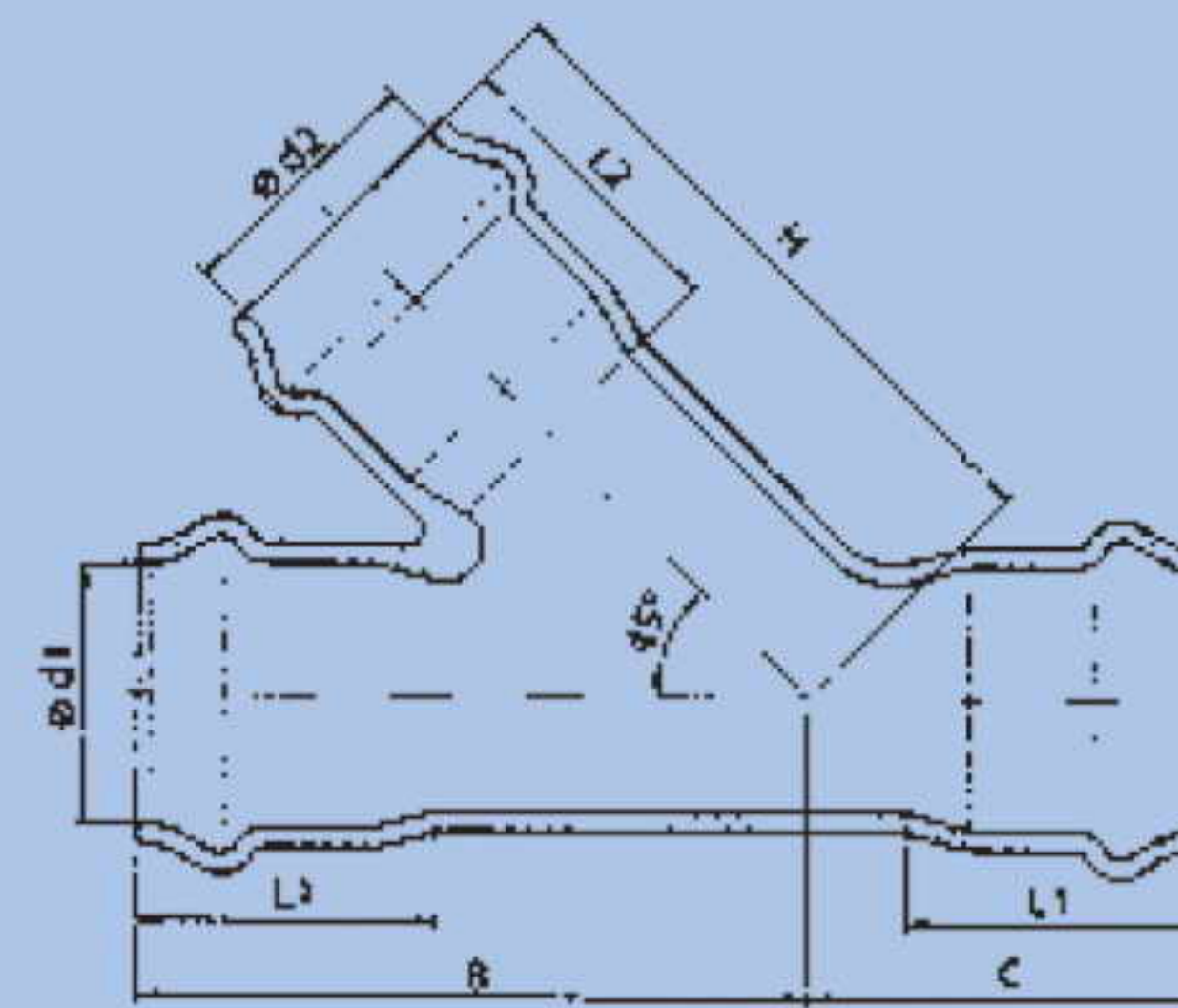
DOUBLE SOCKET
BRANCH FLANGE
TEE



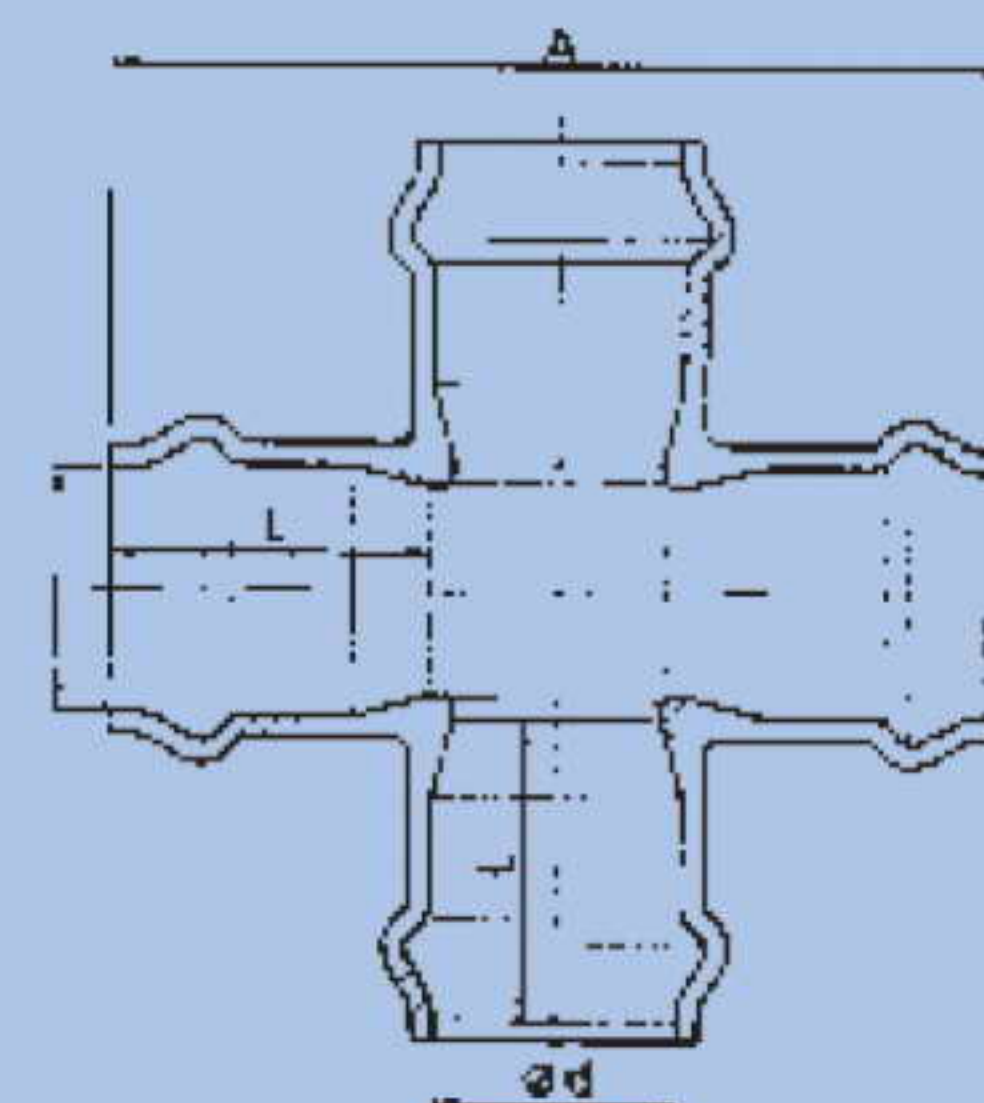
DOUBLE SOCKET
COLLAR WITH
THREADED BRANCH



ALL SOCKET
"Y" TEE



ALL SOCKET
CROSS



Special Fittings

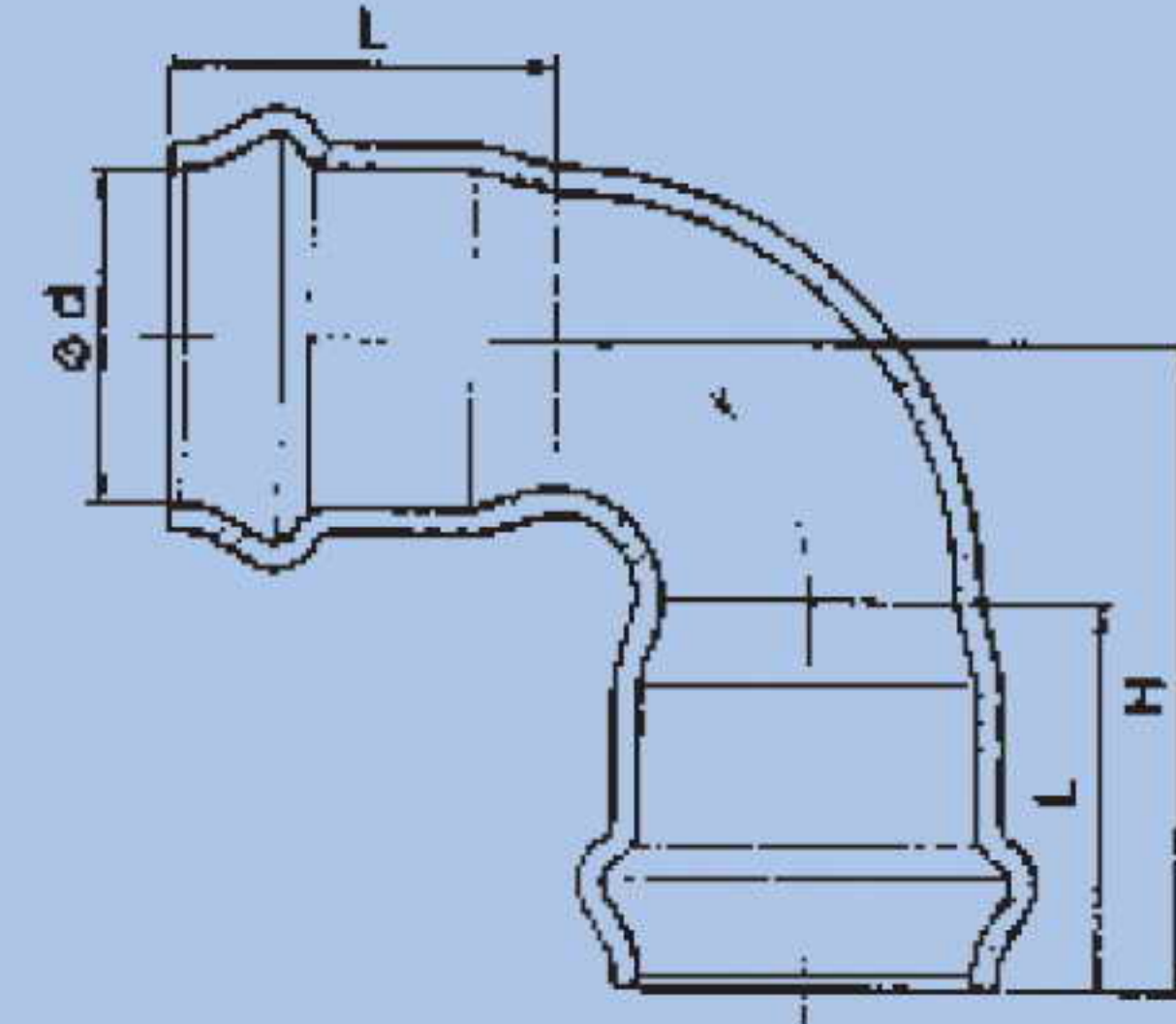
UNITECH Special DI Fittings for uPVC pipes - BENDS



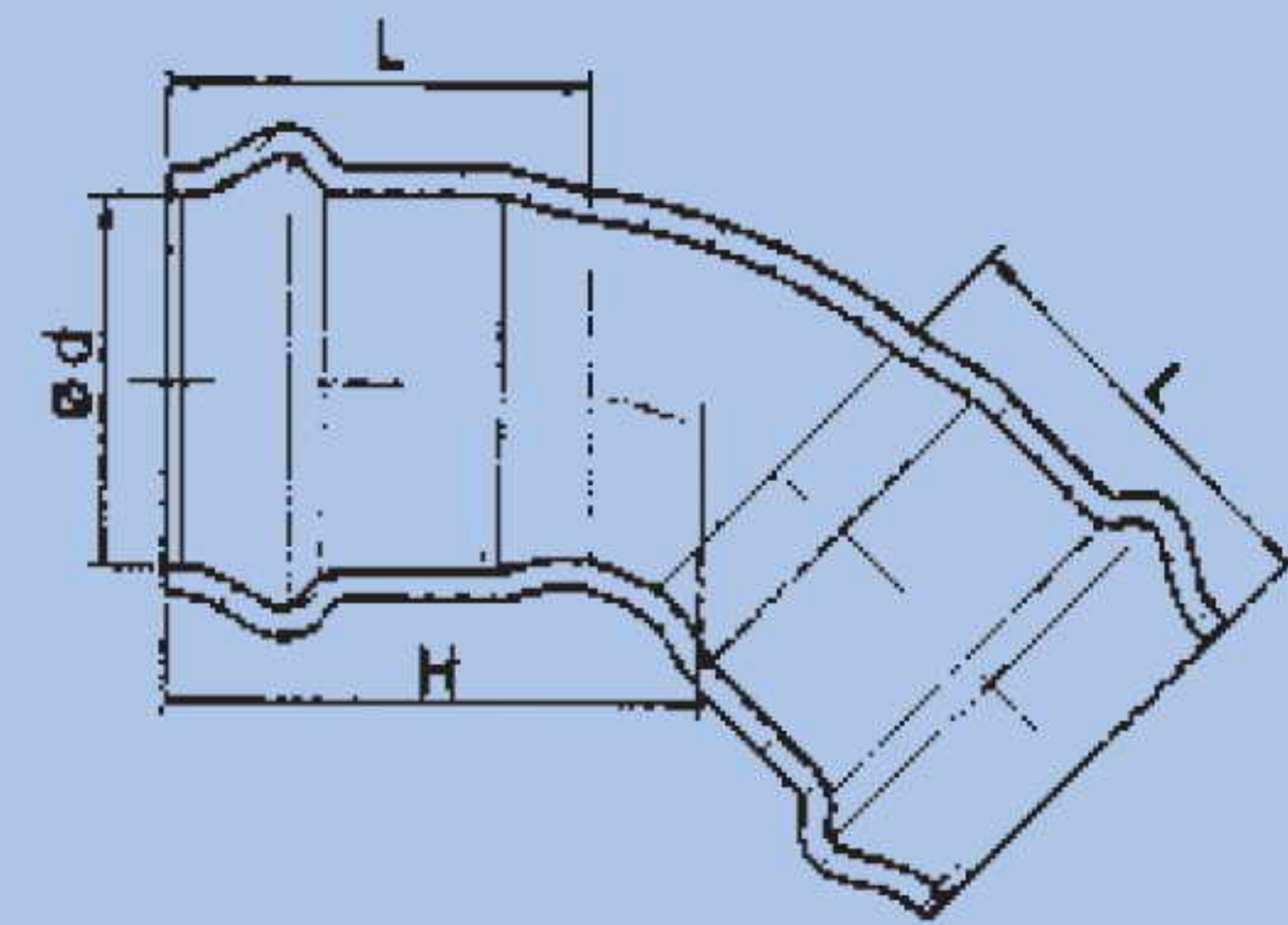
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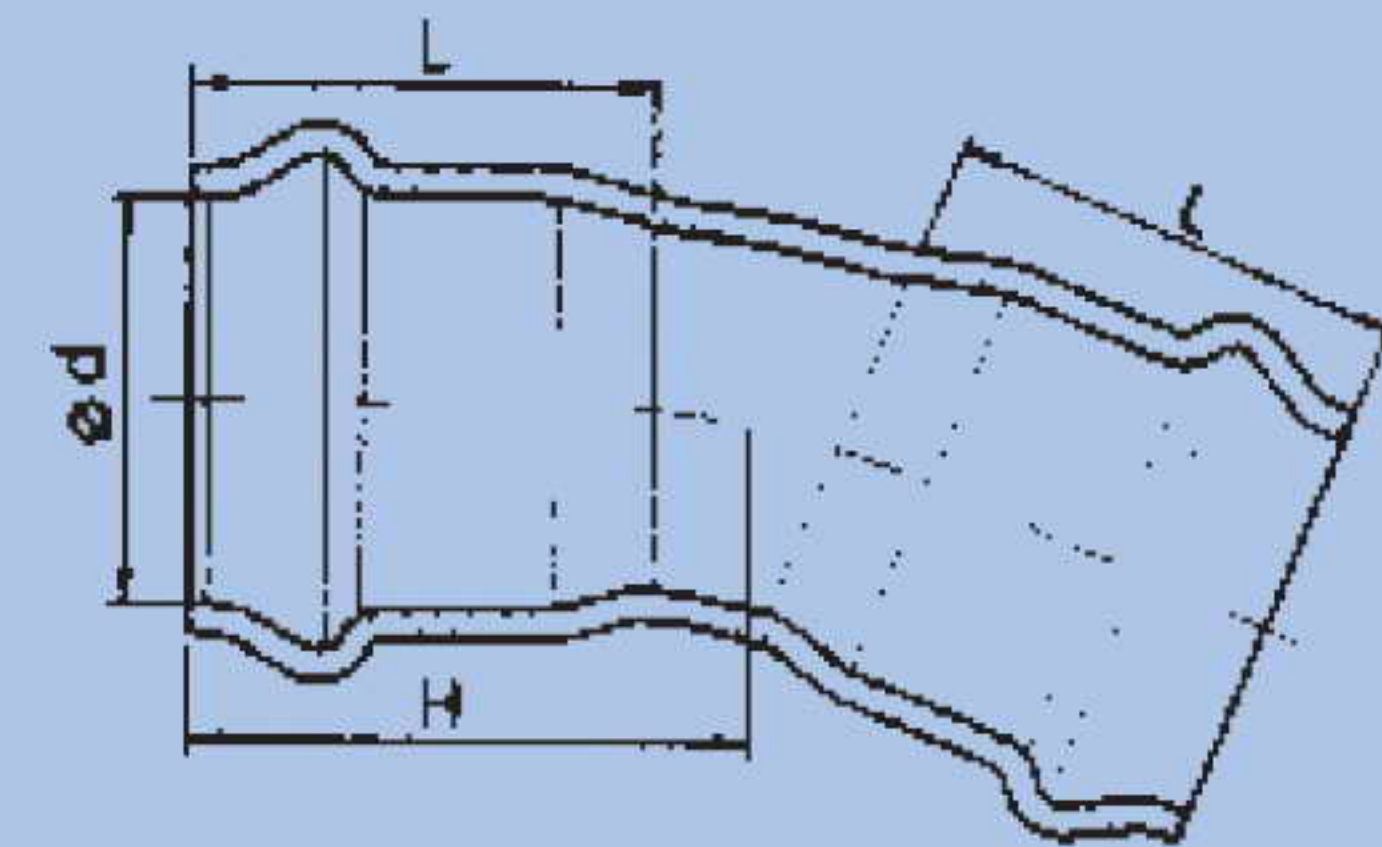
**DOUBLE SOCKET
90 DEG BEND**



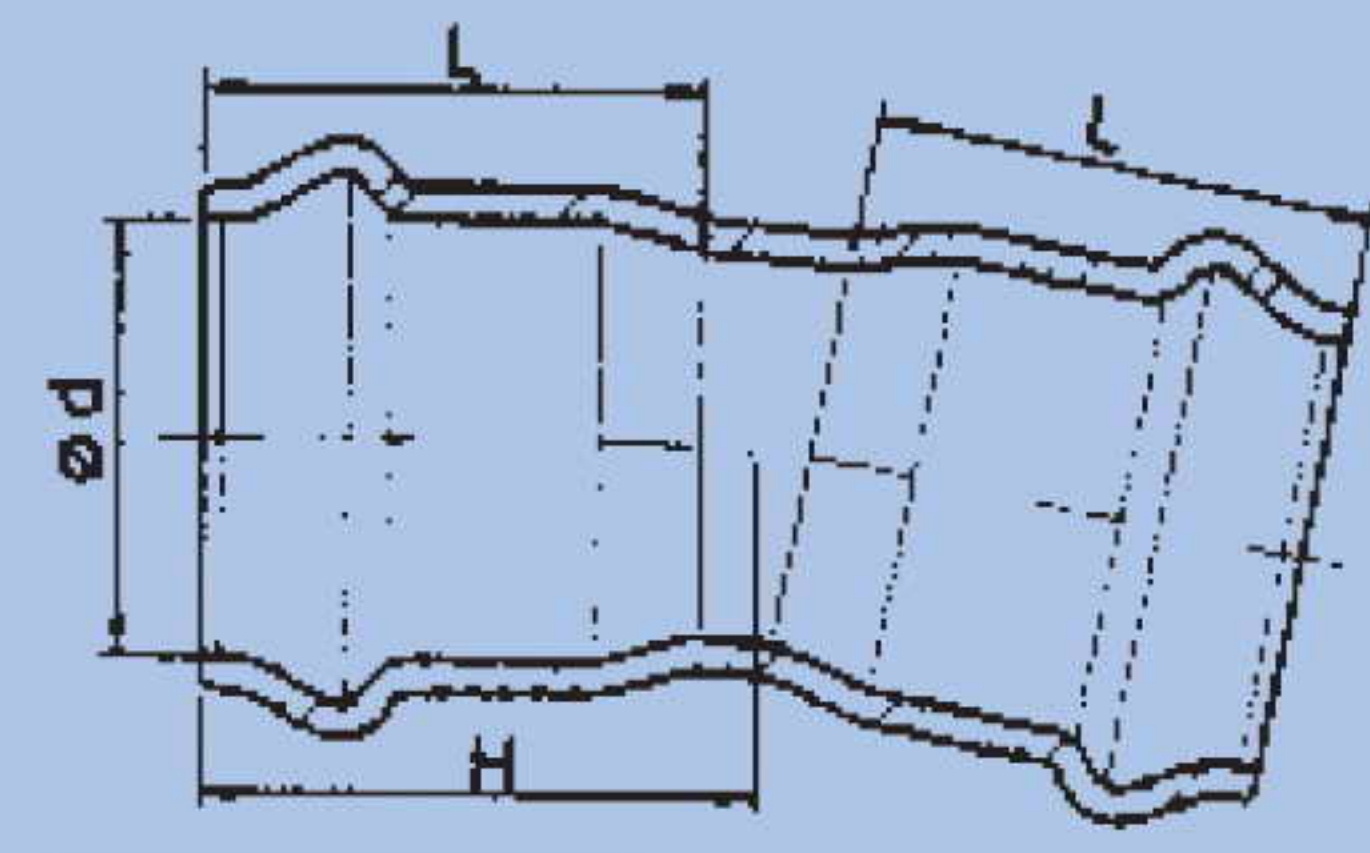
**DOUBLE SOCKET
45 DEG BEND**



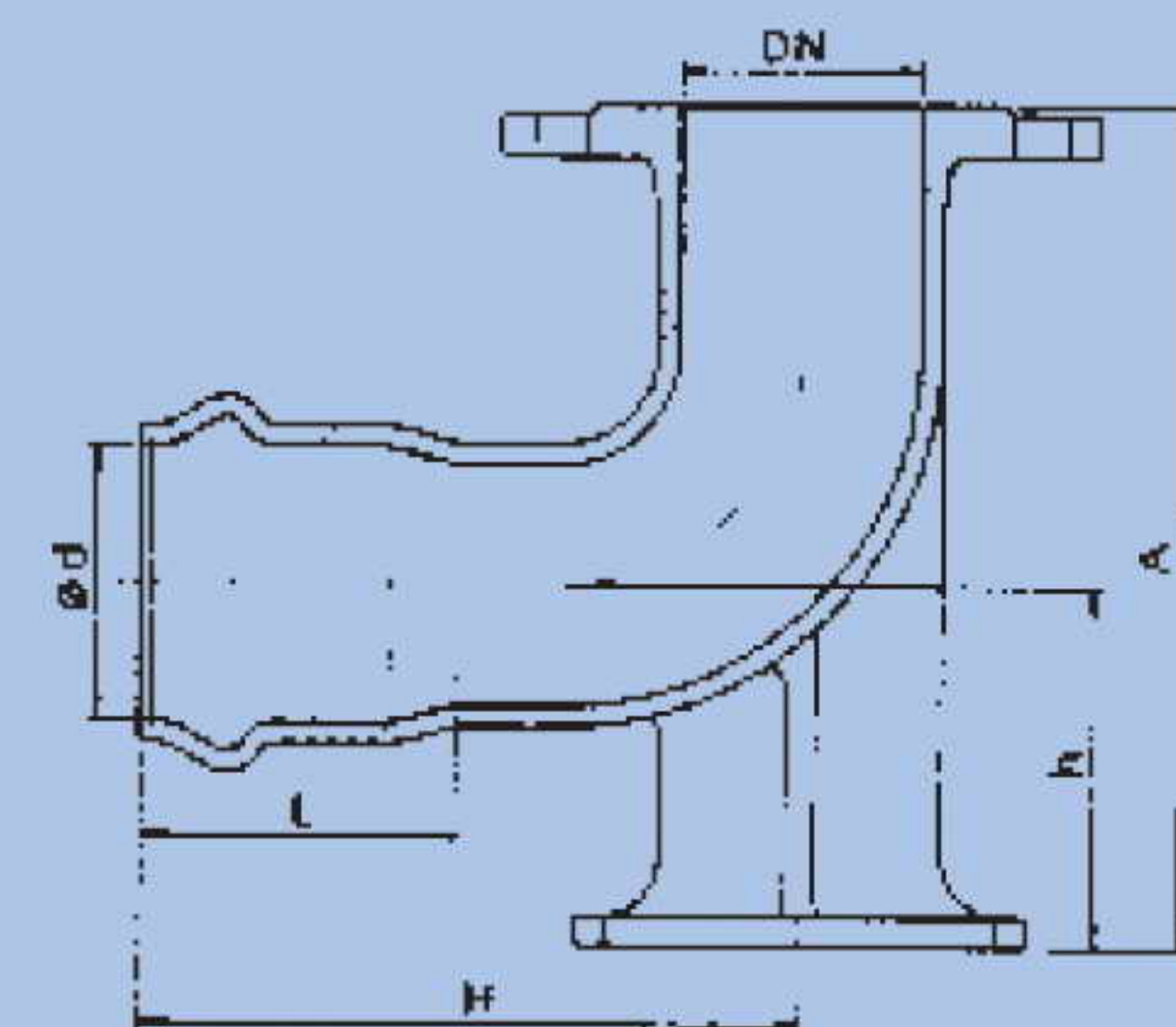
**DOUBLE SOCKET
22.5 DEG BEND**



**DOUBLE SOCKET
11.25 DEG BEND**

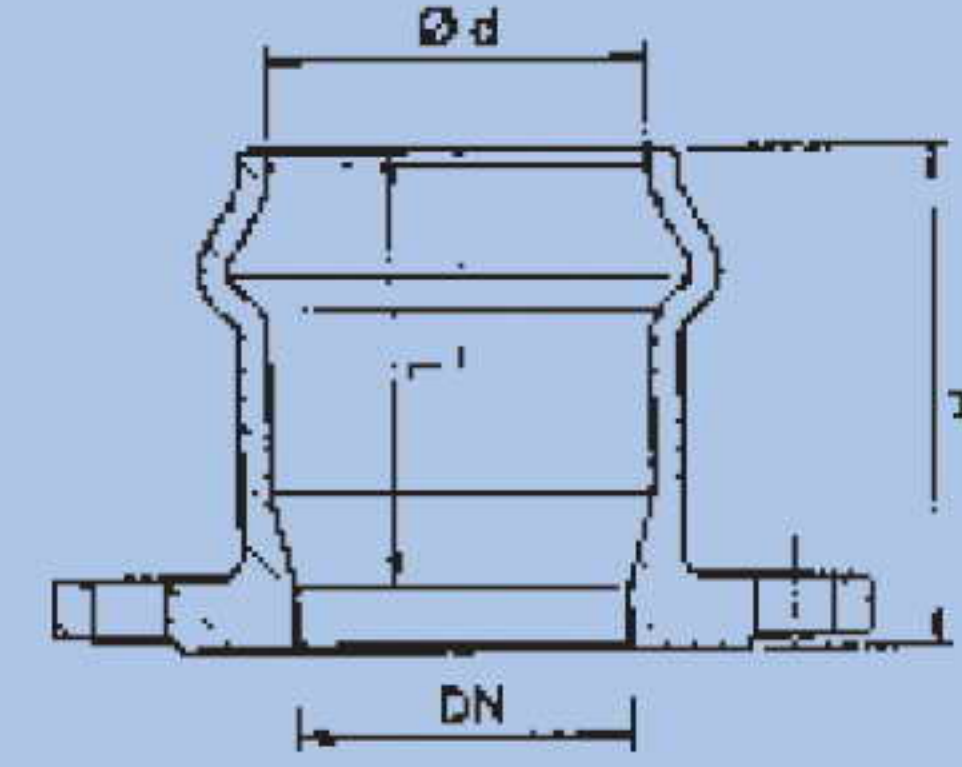


**FLANGE SOCKET
DUCKFOOT
BEND**

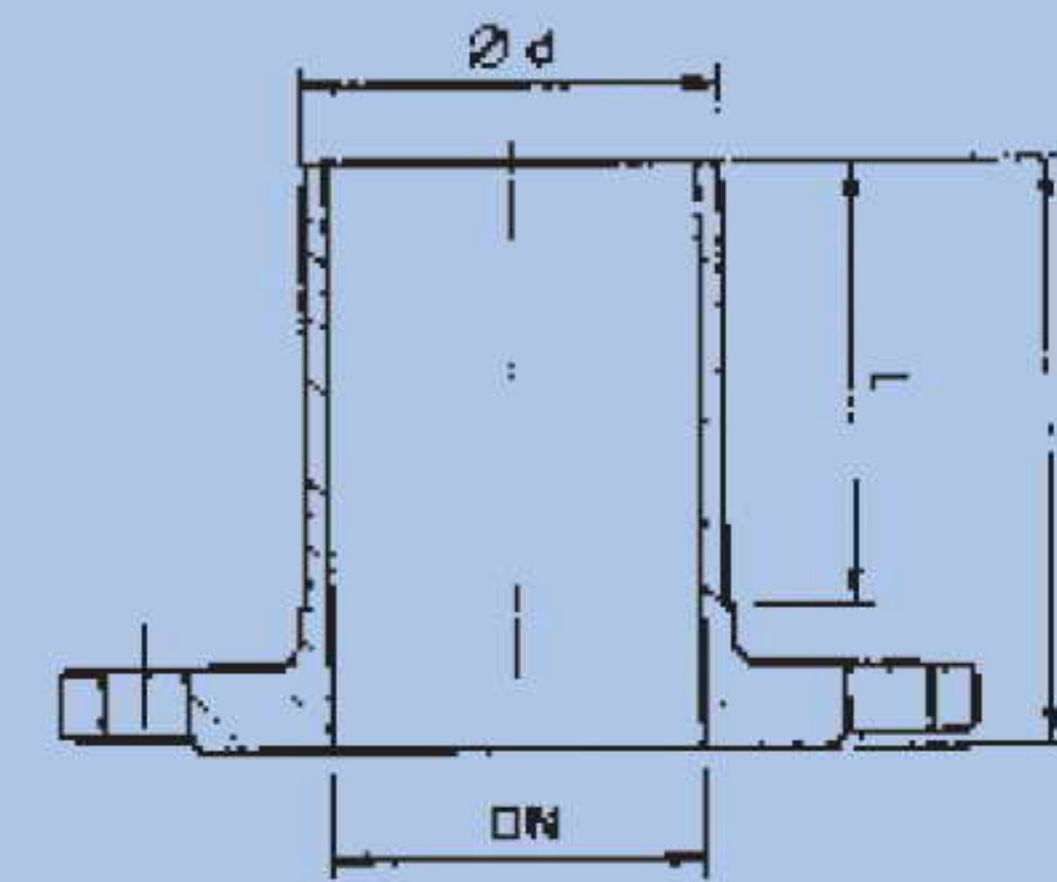




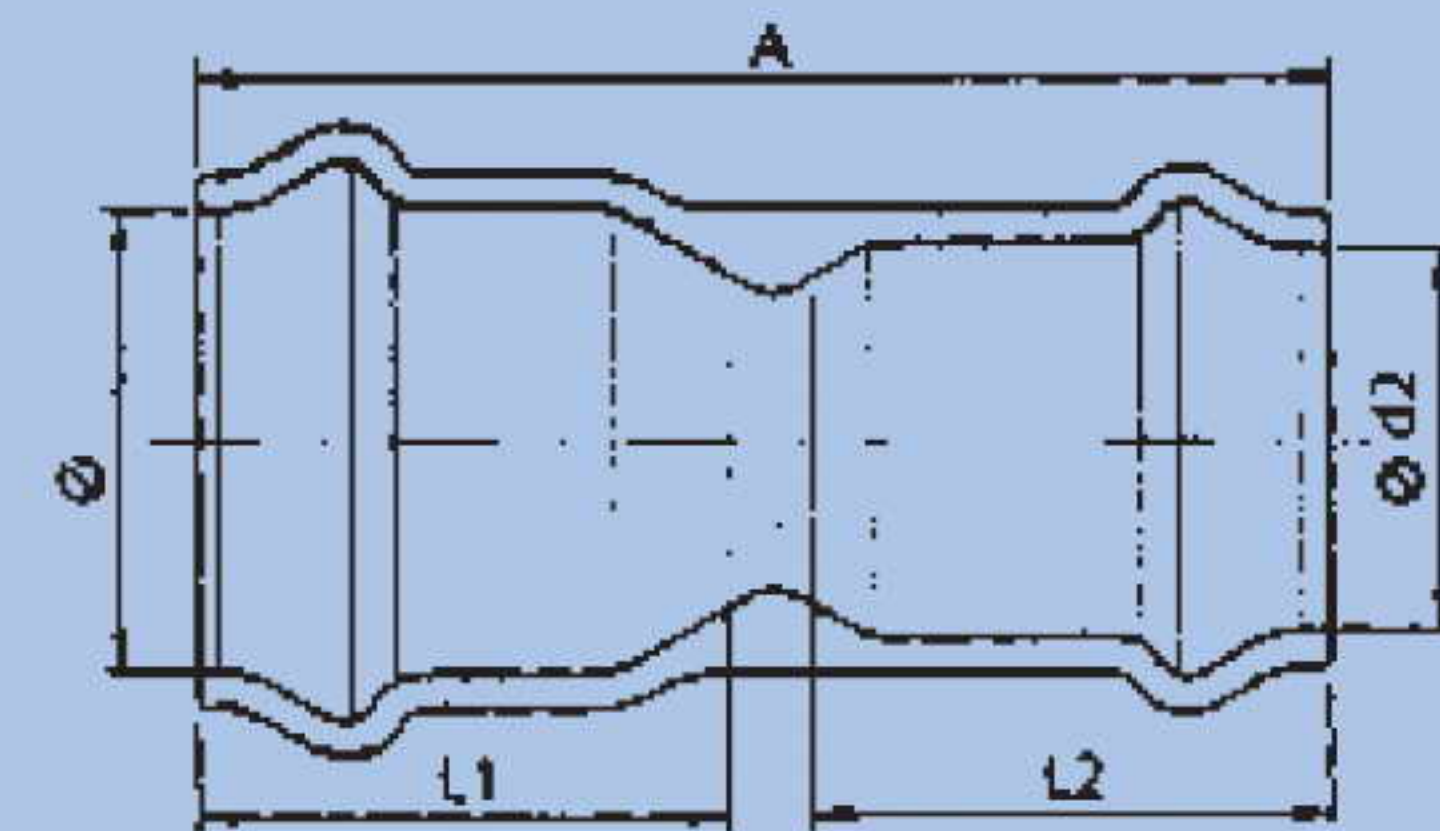
**FLANGED
SOCKET**



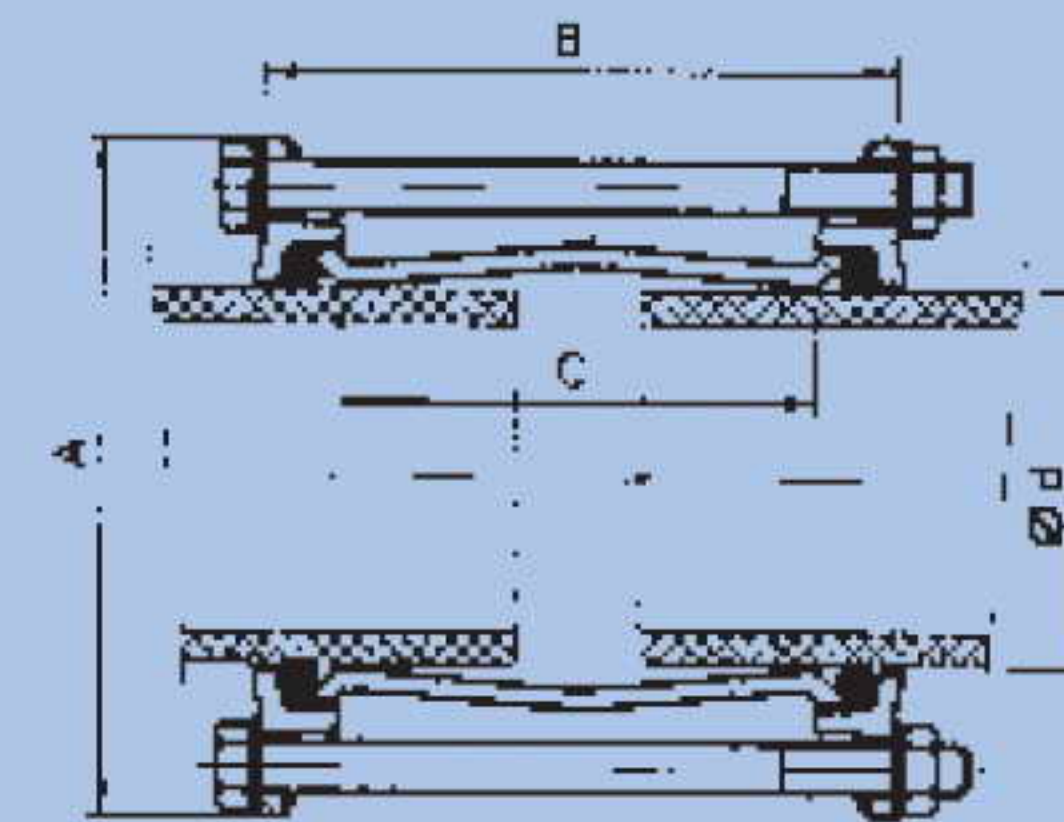
**FLANGED
SPIGOT**



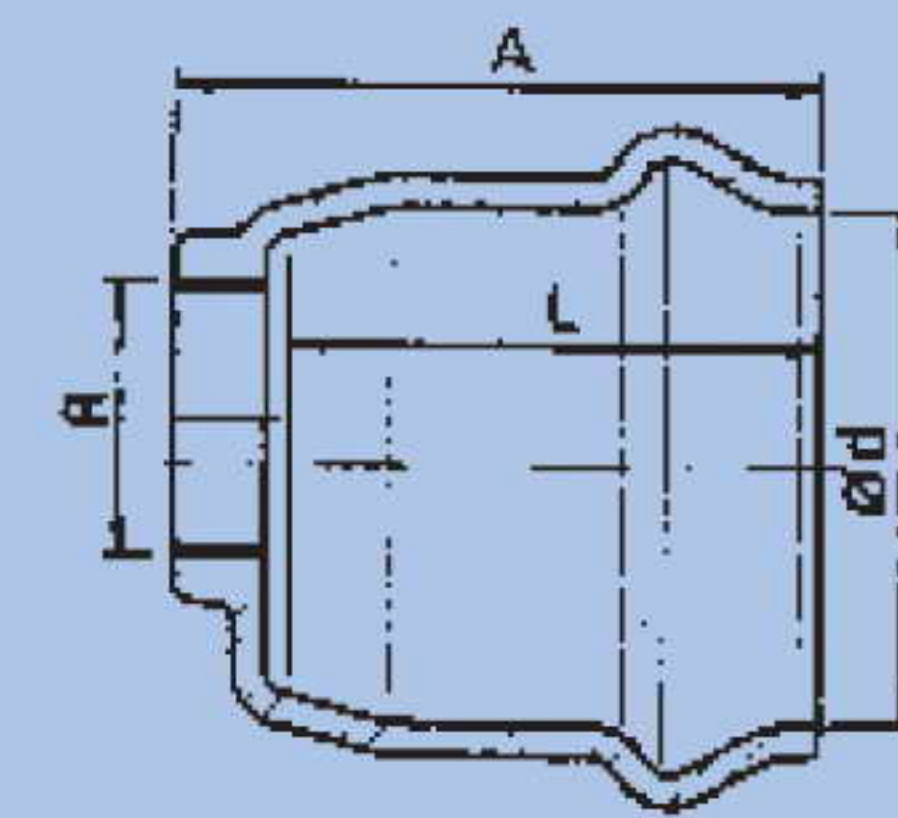
**DOUBLE SOCKET
REDUCER**



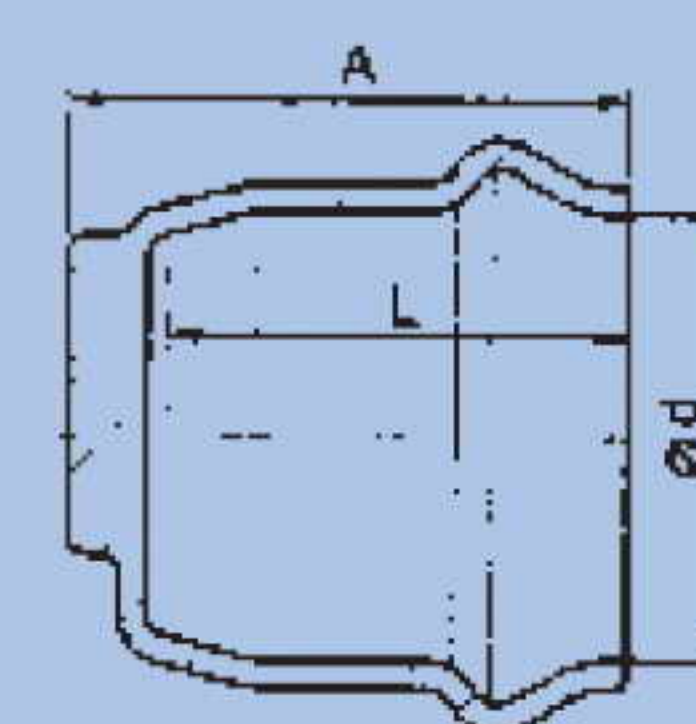
**MECHANICAL
COLLAR JOINT**



END CAPS



**END CAPS
THREADED
BRANCH**





Coatings & Linings

EXTERNAL COATINGS

Kejriwal products are available with multi coating options namely :

- **Bituminous Paint & Zinc Primer/Zinc Metallisation**
- **Epoxy Painting**
- **Fusion Bonded Epoxy Powder Coating**
- **Rilsan Coating**
- **Poly Urethane Coating**

Bituminous Paint & Zinc Primer/Zinc Metallisation

As a normal course, all fittings are spray painted with a coat of zinc rich primer/zinc sprayed/metallised and black bituminous paint.

Epoxy Painting

Epoxy spray painting can be done on all items viz. Pipes, Fittings, Valves for superior finish and excellent corrosion resistance against sea water and others.

Fusion Bonded Epoxy Powder Coating (F.B.E.)

Electrostatic fusion bonded epoxy powder coating can be done on all items viz. Pipes, Fittings, Valves for Ultra Superior finish and excellent corrosion resistance against Sea water and mild acid alkeline solutions.

Rilsan Coating

We have capacity and arrangement for Rilsan coating to be done if required by clients on Pipes, Fittings and Valves.

Poly Urathene Coating (P.U.)

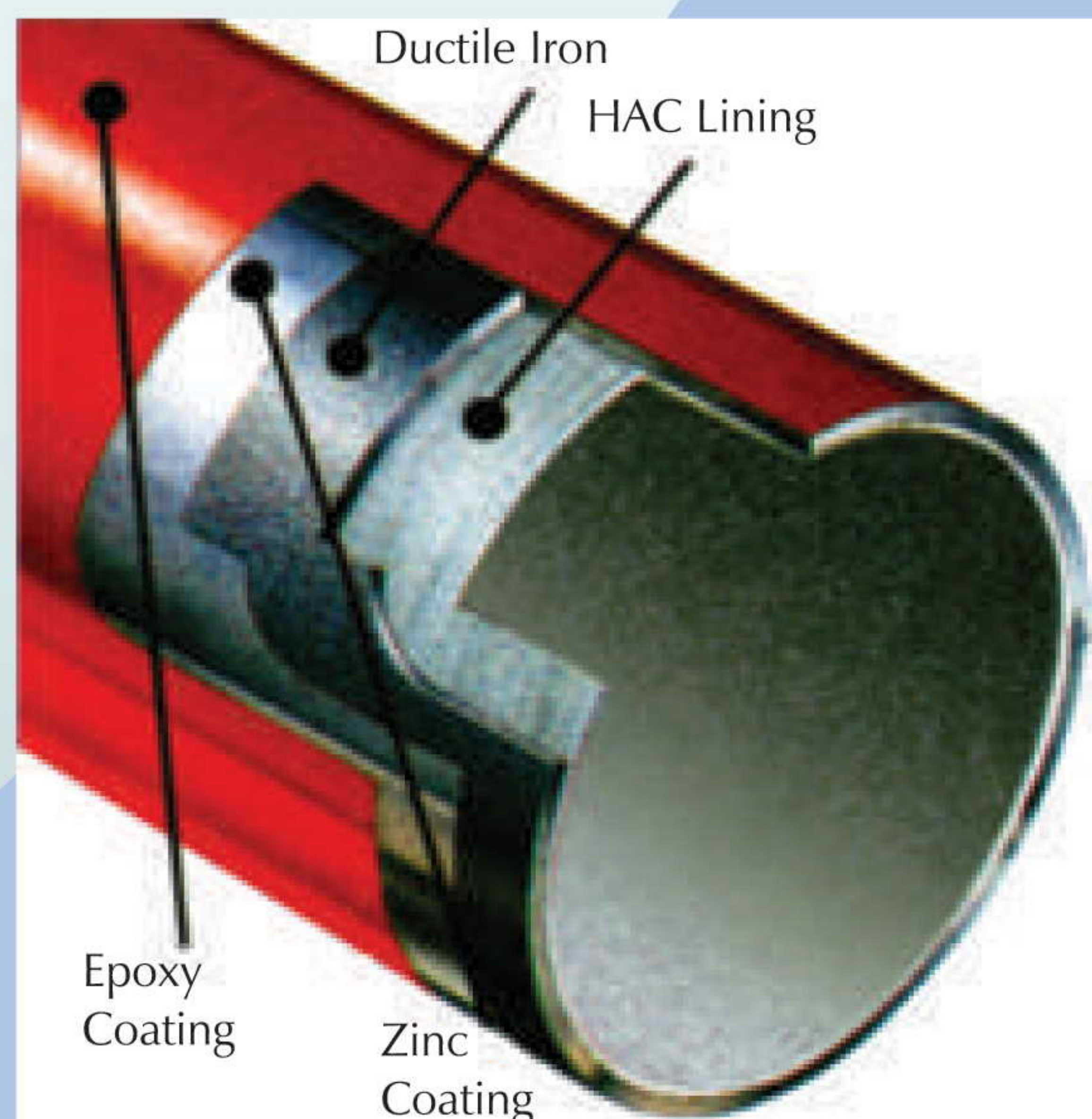
Fittings can be coated with Poly Urathene coating on the outside from 300 to 1000 microns as required.

INTERNAL LININGS

The Ductile Iron products are normally supplied with Cement Mortar lining.

The following linings may be applied depending on the internal conditions of use :

- Portland Cement Mortar
- Blast furnace Slag Cement Mortar
- High Alumina (Calcium Aluminate) Cement Mortar (H.A.C.)
- Sulphite Resistant Cement (SRC) lining
- Bituminous Paint
- Fusion bonded Epoxy Powder Coatings (F.B.E.)
- Poly Urathene Coatings (P.U.).



Easy Technique at site

PUSH ON JOINT EPDM RUBBER GASKET

- The surface area of the pipe to be changed and free from mud, sand, pebbles & frozen materials.
- Recommended lubricant to be applied in inner surface of Gasket to come into contact with pipe.
- Lubricant to be applied on the outer surface of the plain end of pipe & alignment of pipes into socket enabling contact with gasket
- Fit the gasket when the surface is free from foreign particles and clean
- Use thin coat of lubricant on gasket and plain end of pipe
- Place the plain end pipe above the ground

TOOLS REQUIRED

- Calibrated torque wrench, hydraulic or other tensioner, Wire brush (brass if possible)
- Helmet & Safety Goggles, Lubricant

CLEAN & EXAMINE

- Remove all foreign particulates, materials & debris from the seating surfaces, fasteners (bolts or studs), nuts and washers.
- Examine fasteners (bolt or studs), nuts & washers for defects such as burrs or cracks, if any.
- Examine flange surfaces for warping, radial scores, heavy tool marks, or anything prohibiting proper gasket seating.
- Replace components if found to be defective, if any doubt, seek advice.

ALIGN FLANGES

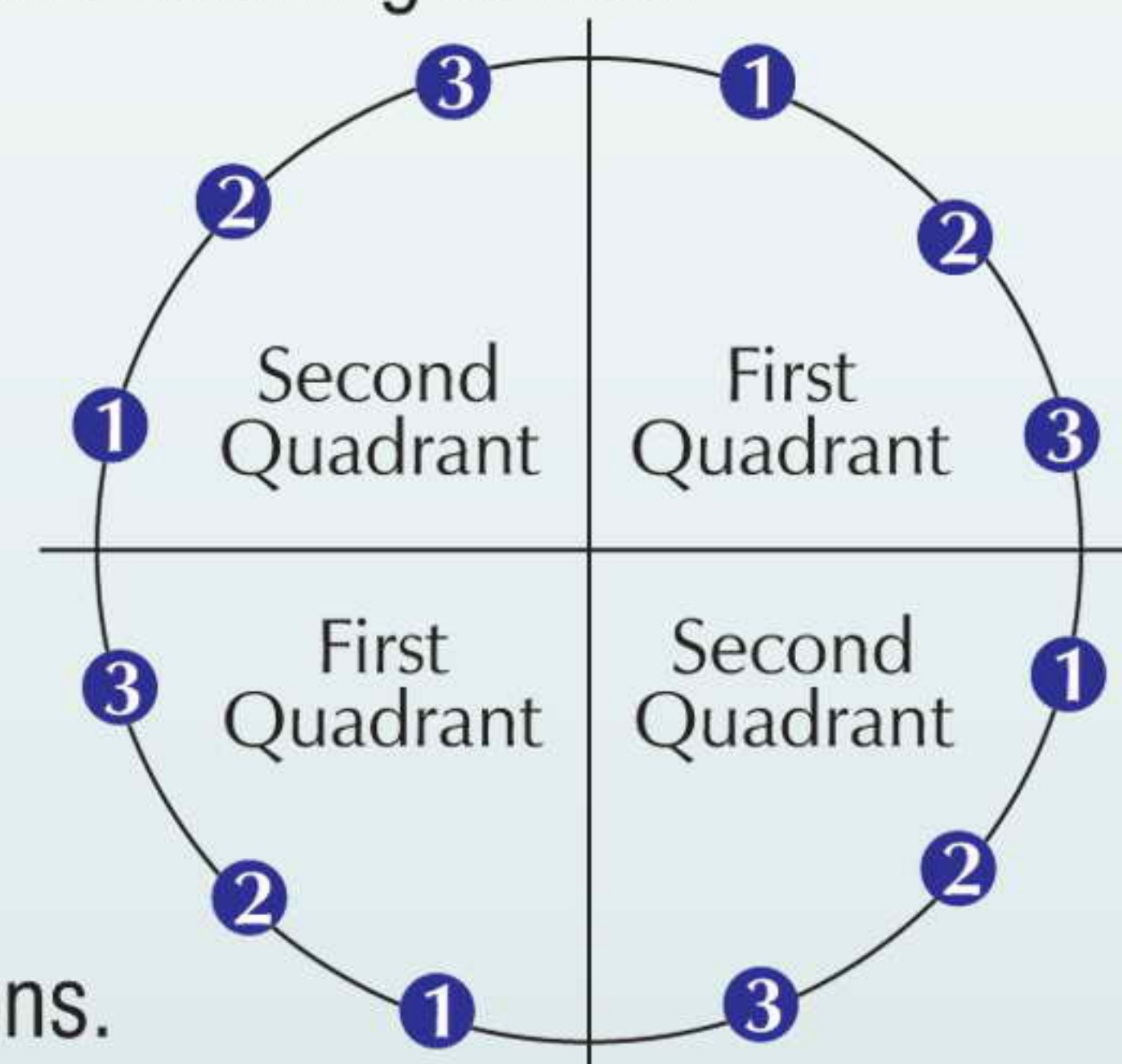
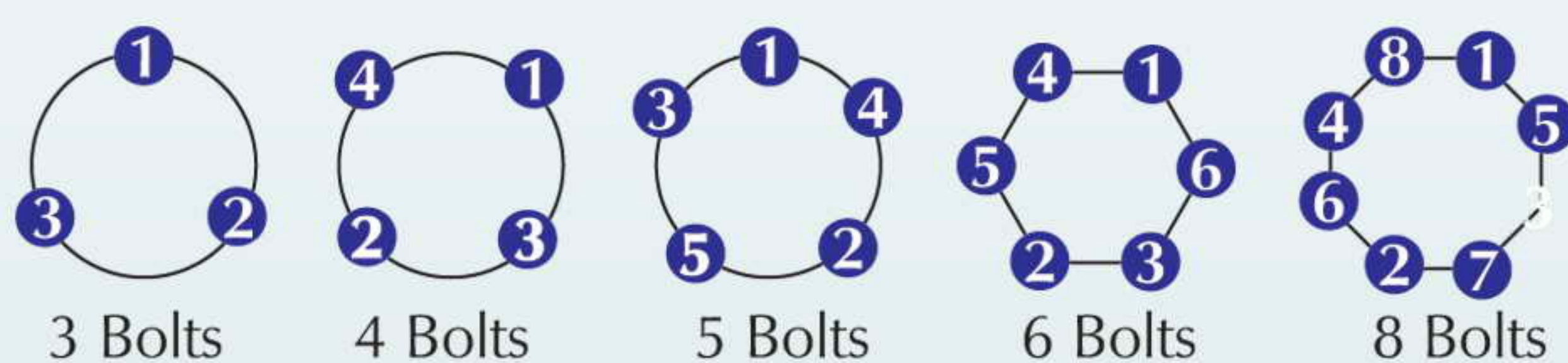
- Align flanges faces and bolt holes without using excessive force. Report any misalignment.

INSTALL GASKET

- Assure gasket is the specified size and material
- Examine the gasket to ensure it is free of defects
- Carefully insert gasket between flanges.
- Make sure the gasket is centered between the flanges.
- Do not use joining compounds or release agents on the gasket for seating surfaces unless specified by the gasket manufacturer.
- Bring flanges together, ensuring the gasket is not pinched or damaged.

INSTALL & TIGHTEN BOLTS

- Always use proper tools – calibrated torque wrench or other controlled tensioning device.



ADHERANCE

- Consult your gasket manufacturer for guidance on torque specifications.
- Always torque nuts in a cross bolt tightening pattern
- Tighten the nuts in multiple steps
- Step 1 – tighten all nuts initially by hand (larger bolts may require a small hand wrench)
- Step 2 – torque each nut to approx 30% of full torque.
- Step 3 – torque the nuts to approx. 60% of full torque.
- Step 4 – torque each nut to full torque, again using the cross bolt tightening pattern.
- Step 5 – apply at-least one final full torque to all nuts in a clock-wise direction until all torque is uniform.

RE-TIGHTENING

- Consult your gasket manufacturer for guidance and recommendations on retightening
- Do not re-torque elastomer-based, asbestos free gaskets after they have been exposed to elevated temperatures.
- Retorque fasteners exposed to aggressive thermal cycling.
- All re-torquing should be performed at ambient temperature and atmospheric pressure.

EQUIPMENT REQUIRED

- Brushes
- Paint brushes
- Trowel
- Palette knife
- Repair product

PROCEDURE

- Position the part so that the area to be repaired points downwards.
- Eliminate any loose parts with the wire brush.
- Clean thoroughly
- Wet the area to be repaired.
- Wet around the area to be repaired a few minutes before making the repair.
- Prepare the mixture as indicated below

PROPORTION BY WEIGHT

- 100 - Cement (suitable for water supply)
- 200 - Fine sand
- 15- Emulsion (50/50) water/ICOMENT or equivalent
- 20- Eliminate the damaged parts of the cement by making a clean cut perpendicular to the cast ductile iron
- 20- Water

Mix the 2 dry components, then the 2 liquid components to obtain a pasty consistency. Add a little water if necessary. Apply the mortar compacting correctly to build up the required thickness and Smooth the surface. Apply an additional protective layer (water & emulsion) to prevent the cement from drying out too quickly. Cover with a damp cloth.

EQUIPMENT REQUIRED

- Brush
- Paint brushes
- Spatula
- Gas torch

PROCEDURE

- Eliminate any loose parts with the wire brush
- Clean thoroughly
- Dry the surface to be coated
(in case of low temperature or humidity, it may be necessary to dry with gas torch).
- Apply the PU paint with a paint brush or spatula

Our Projects INSTALLED





Our Projects INSTALLED





Sumbawanga Water Supply, 2012

Our Projects

(Primer before Poly-Urethane Coating)



Construction of Water Distribution Network, 2013



Construction of Water Distribution Network, 2013

Our Projects

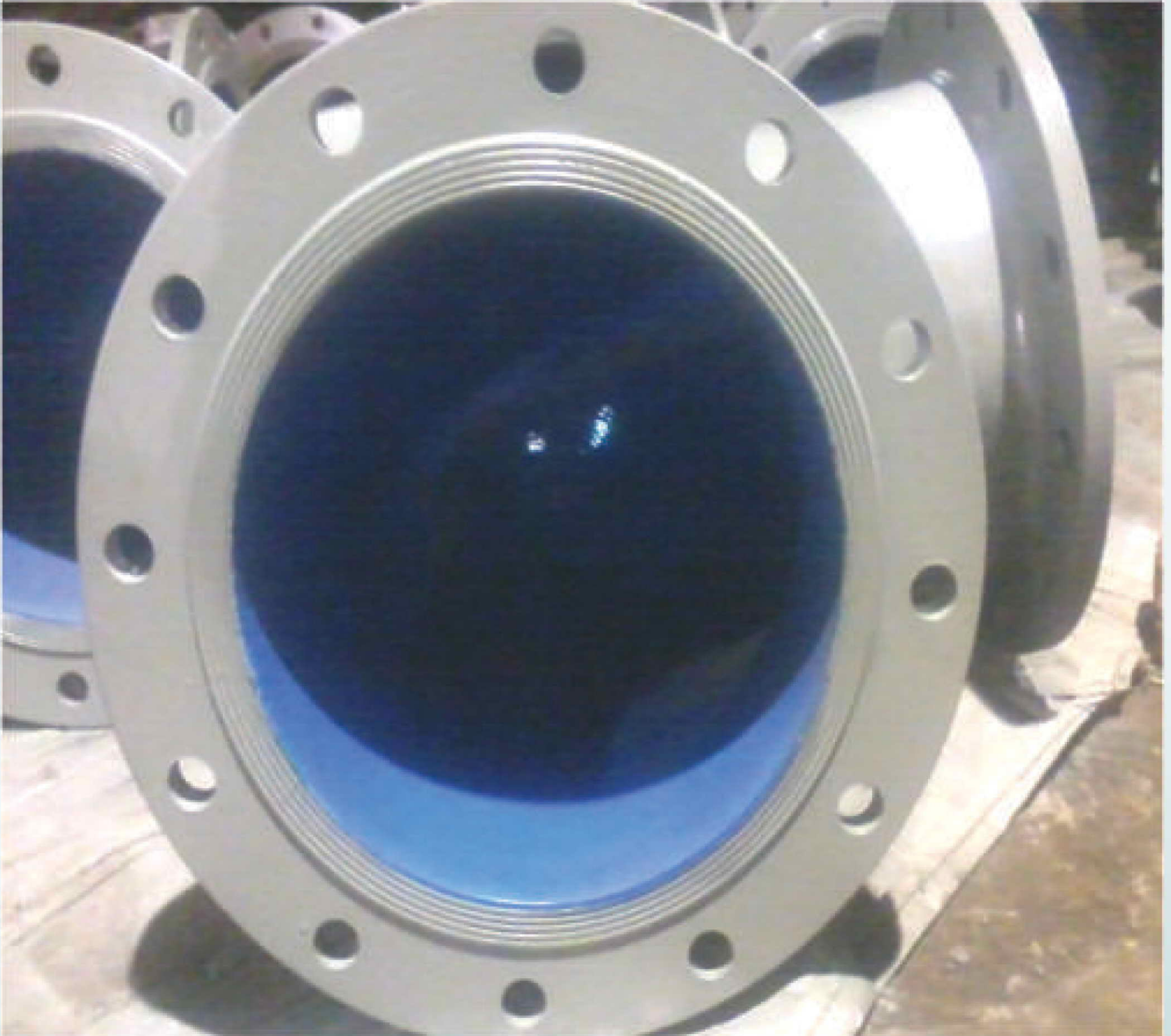
(Internal Fusion Bonded With Epoxy with External Poly-Urethane Coating)



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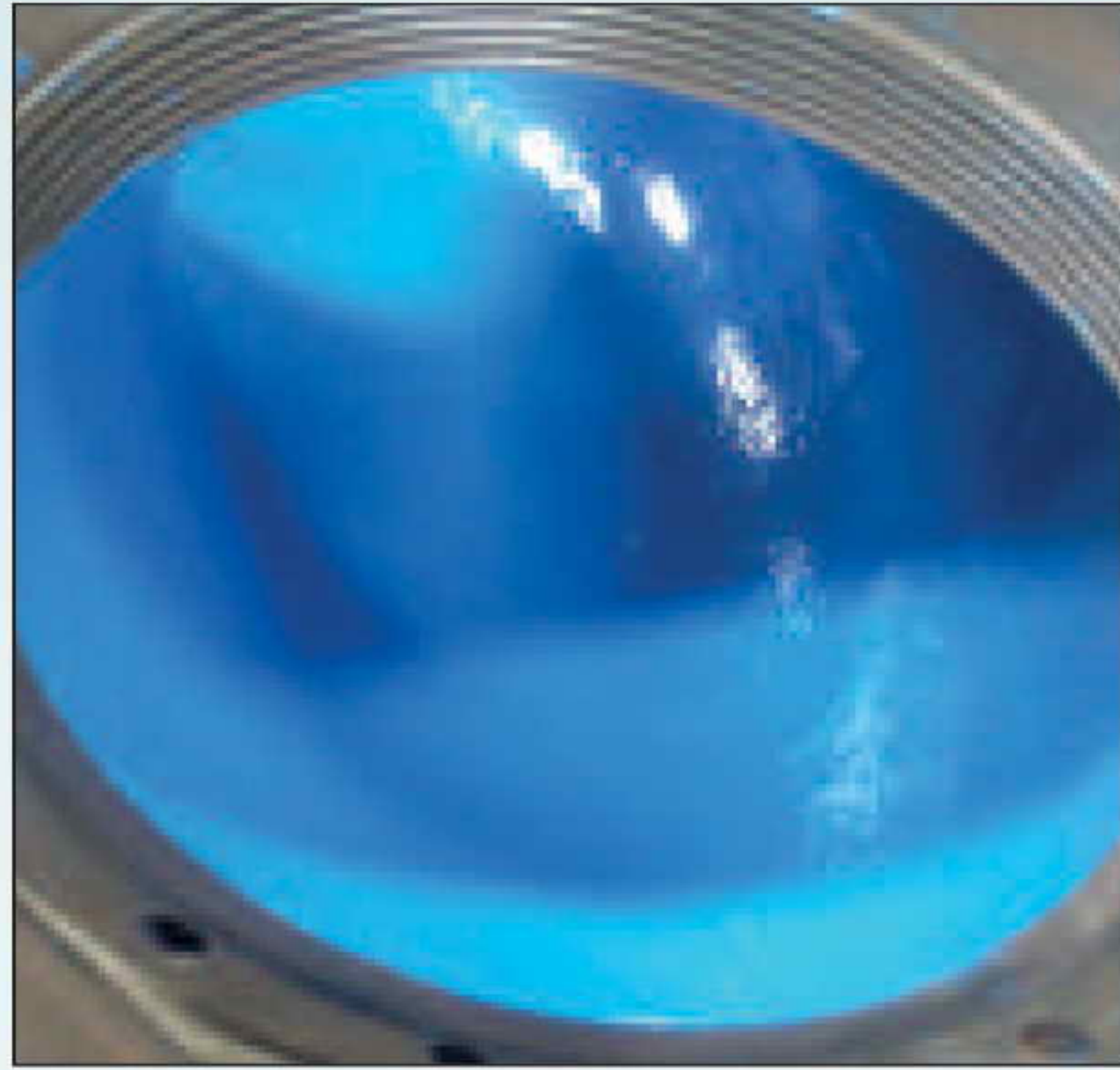
Talin Power Plant Renewal, 2014



Talim Power Plant Renewal, 2014



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Total Pipe Line Solution

UNITECHTM

DI PIPES & FITTINGS MFG.