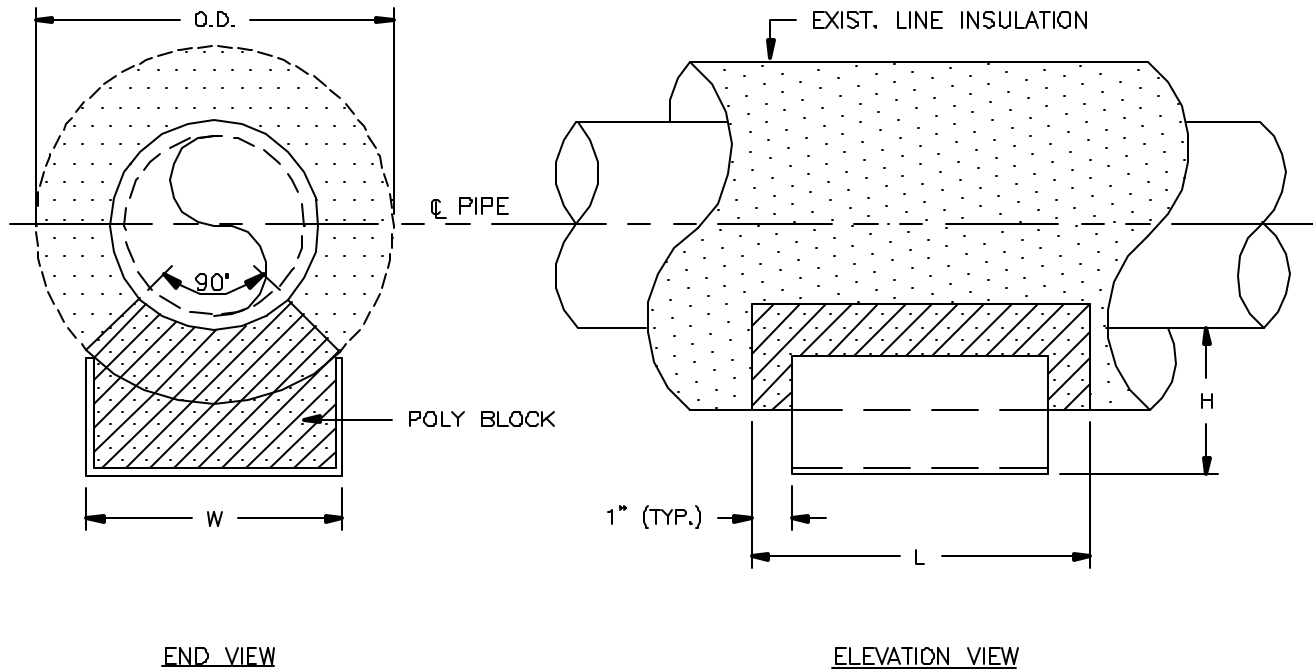


### SPECIFICATIONS

INSULATION THK: \_\_\_\_\_  
 SHOE LENGTH: \_\_\_\_\_  
 LOADS: VERTICAL \_\_\_\_\_  
           LATERAL \_\_\_\_\_  
           AXIAL \_\_\_\_\_  
 TEMPERATURE: \_\_\_\_\_



Design: PT&P 6/1/1999 4:09 PM CS-5010

## NOTES

FIGURE#: CS-5010 (CRYOSHOE™)  
 DESCRIPTION: BASE INSULATED SHOES,  
 90° INSULATION

FUNCTION:	USE ON EXISTING INSULATED LINES TO SUPPORT MINIMUM VERTICLE, AXIAL, AND LATERAL LOADS - - -
PIPE SIZE:	1/2" TO 42" NPS
MATERIAL:	GALVANIZED OR HDG CARBON STEEL
INSULATION:	HIGH DENSITY POLYURETHANE WITH VAPOR BARRIER
TEMP. RANGE:	AMBIENT TO -300°F
LAYERING SY.:	SEE LAYERING CHARTS
SHOE LTH.(L):	STANDARD SHOE AVAILABLE IN 12" & 18" LENGTHS
TO ORDER:	SPECIFY PIPE SIZE, INSULATION THK., LENGTH HENCE: (CS-5010)-NPS-THK-L
LOADS:	ALL LOADS ON ADJACENT CHART HAVE A SAFETY FACTOR OF 5

CLIENT NAME: \_\_\_\_\_  
 PROJECT NAME: \_\_\_\_\_  
 REQUISITION#: \_\_\_\_\_  
 P O #: \_\_\_\_\_  
 DWG#: \_\_\_\_\_  
 MARK#: \_\_\_\_\_  
 PT&P JOB#: \_\_\_\_\_ ITEM#: \_\_\_\_\_  
 DATE: \_\_\_\_\_

## PIPING TECHNOLOGY & PRODUCTS, INC.

P.O. BOX 34506                      HOUSTON TEXAS 77234  
 3701 HOLMES RD.                    HOUSTON TEXAS 77051  
 TELE#:(713)731-0030                FAX#:(713)731-8640  
<http://www.pipingtech.com/>        E-MAIL: info@pipingtech.com



CS-5010 Base Insulated Shoes: 90 Degree Insulation

Pipe size	L=12" Vertical Load(lbs)	L=18" Vertical Load(lbs)	Insulation Thickness								
			1"			1-1/2"			2"		
			W	O.D.	H	W	O.D.	H	W	O.D.	H
1/2"	162	232	2"	2-7/8"	4"	2-13/16"	4"	4"	3-1/2"	5"	4"
3/4"	203	290	2"	2-7/8"	4"	2-13/16"	4"	4"	3-1/2"	5"	4"
1"	254	363	2-1/2"	3-1/2"	4"	3-3/16"	4-1/2"	4"	3-15/16"	5-9/16"	4"
1-1/4"	321	459	2-1/2"	3-1/2"	4"	3-1/2"	4-1/2"	4"	3-15/16"	5-9/16"	4"
1-1/2"	368	525	2-13/16"	4"	4"	3-1/2"	5"	4"	4-11/16"	6-5/8"	4"
2"	459	656	3-3/16"	4-1/2"	4"	3-15/16"	5-9/16"	4"	4-11/16"	6-5/8"	4"
2-1/2"	556	794	3-1/2"	5"	4"	4-11/16"	6-5/8"	4"	5-3/8"	7-5/8"	4"
3"	677	967	3-15/16"	5-9/16"	4"	4-11/16"	6-5/8"	4"	5-3/8"	7-5/8"	4"
3-1/2"	774	1105	4-11/16"	5-5/8"	4"	5-3/8"	7-5/8"	4"	6-1/8"	8-5/8"	4"
4"	870	1243	4-11/16"	5-5/8"	4"	5-3/8"	7-5/8"	4"	6-1/8"	8-5/8"	4"
5"	1076	1537	5-3/8"	7-5/8"	4"	6-1/8"	8-5/8"	4"	6-13/16"	9-5/8"	4"
6"	1281	1831	6-1/8"	8-5/8"	4"	6-13/16"	9-5/8"	4"	7-5/8"	10-3/4"	4"
8"	2502	3575	7-5/8"	10-3/4"	4"	8-5/16"	11-3/4"	4"	8-11/16"	12-3/4"	4"
10"	3119	4456	9"	12-3/4"	4"	9-15/16"	14"	4"	10-5/8"	15"	4"
12"	3699	5285	10-5/8"	15"	4"	11-5/16"	16"	4"	12"	17"	4"
14"	4062	5803	11-5/16"	16"	4"	12"	17"	4"	12-3/4"	18"	4"

Pipe size	L=12" Vertical Load(lbs)	L=18" Vertical Load(lbs)	Insulation Thickness											
			2-1/2"			3"			3-1/2"			4"		
			W	O.D.	H	W	O.D.	H	W	O.D.	H	W	O.D.	H
1/2"	162	232	4-11/16"	6-5/8"	4"	5-3/8"	7-5/8"	6"	6-1/8"	8-5/8"	6"	6-13/16"	9-5/8"	6"
3/4"	203	290	4-11/16"	6-5/8"	4"	5-3/8"	7-5/8"	6"	6-1/8"	8-5/8"	6"	6-13/16"	9-5/8"	6"
1"	254	363	4-11/16"	6-5/8"	4"	5-3/8"	7-5/8"	6"	6-1/8"	8-5/8"	6"	6-13/16"	9-5/8"	6"
1-1/4"	321	459	4-11/16"	6-5/8"	4"	5-3/8"	7-5/8"	6"	6-1/8"	8-5/8"	6"	6-13/16"	9-5/8"	6"
1-1/2"	368	525	5-3/8"	6-5/8"	4"	6-1/8"	8-5/8"	6"	6-13/16"	9-5/8"	6"	7-5/8"	10-3/4"	6"
2"	459	656	5-3/8"	7-5/8"	4"	6-1/8"	8-5/8"	6"	6-13/16"	10-3/4"	6"	7-5/8"	10-3/4"	6"
2-1/2"	556	794	6-1/8"	8-5/8"	4"	6-13/16"	9-5/8"	6"	7-5/8"	10-3/4"	6"	8-5/16"	11-3/4"	6"
3"	677	967	6-1/8"	8-5/8"	4"	6-13/16"	9-5/8"	6"	7-5/8"	11-3/4"	6"	7-5/8"	11-3/4"	6"
3-1/2"	774	1105	6-13/16"	9-5/8"	4"	7-5/8"	10-3/4"	6"	8-5/16"	11-3/4"	6"	9"	12-3/4"	6"
4"	870	1243	6-13/16"	9-5/8"	4"	7-5/8"	11-3/4"	6"	8-5/16"	12-3/4"	6"	9"	12-3/4"	6"
5"	1076	1537	7-5/8"	10-3/4"	4"	8-5/16"	11-3/4"	6"	9"	12-3/4"	6"	9-15/16"	14"	6"
6"	1281	1831	8-5/16"	11-3/4"	4"	9"	12-3/4"	6"	9-15/16"	14"	6"	10-5/8"	15"	6"
8"	2502	3575	9-15/16"	14"	4"	10-5/8"	15"	6"	11-5/16"	16"	6"	12"	17"	6"
10"	3119	4456	11-5/16"	16"	4"	12"	17"	6"	12-3/4"	18"	6"	13-7/16"	20"	6"
12"	3699	5285	12-11/16"	18"	4"	13-7/16"	19"	6"	14-1/8"	20"	6"	14-13/16"	21"	6"
14"	4062	5803	13-7/16"	19"	4"	14-1/8"	20"	6"	14-13/16"	21"	6"	15-5/8"	22"	6"

Pipe size	L=12" Vertical Load(lbs)	L=18" Vertical Load(lbs)	Insulation Thickness								
			1"			1-1/2"			2"		
			W	O.D.	H	W	O.D.	H	W	O.D.	H
16"	7737	11053	12-3/4"	18"	4"	13-7/16"	19"	4"	14-1/8"	20"	6"
18"	8704	12434	14-1/8"	20"	4"	14-13/16"	21"	4"	15-5/8"	22"	6"
20"	9671	13816	15-5/8"	22"	4"	16-5/16"	23"	4"	9"	24"	6"
24"	11605	16579	18-7/16"	26"	4"	19-1/8"	27"	4"	19-13/16"	28"	6"
26"	12573	17961	19-13/16"	28"	4"	20-1/2"	29"	4"	21-1/2"	30"	6"
28"	13540	19342	21-3/16"	30"	4"	21-15/16"	31"	4"	22-5/8"	32"	6"
30"	14507	20724	22-5/8"	32"	4"	23-5/16"	33"	4"	24"	34"	6"
32"	15474	22106	24"	34"	4"	24-3/4"	35"	4"	25-1/2"	36"	6"
34"	16441	23487	25-1/2"	36"	4"	26-1/4"	37"	4"	26-7/8"	38"	6"
36"	17408	24869	26-7/8"	38"	4"	27-9/16"	39"	4"	28-5/16"	40"	6"
40"	19342	27632	29-11/16"	42"	4"	30-7/16"	43"	4"	31-1/8"	44"	6"
42"	20310	29014	31-1/8"	44"	4"	31-13/16"	45"	4"	32-1/2"	46"	6"

Pipe size	L=12" Vertical Load(lbs)	L=18" Vertical Load(lbs)	Insulation Thickness											
			2-1/2"			3"			3-1/2"			4"		
			W	O.D.	H	W	O.D.	H	W	O.D.	H	W	O.D.	H
16"	7737	11053	14-13/16"	21"	6"	15-5/8"	22"	6"	16-1/4"	23"	6"	17"	24"	6"
18"	8704	12434	16-5/16"	23"	6"	17"	24"	6"	17-11/16"	25"	6"	18-7/16"	26"	6"
20"	9671	13816	17-3/4"	25"	6"	18-7/16"	26"	6"	19-1/8"	27"	6"	19-13/16"	28"	6"
24"	11605	16579	20-1/2"	29"	6"	21-1/4"	30"	6"	21-15/16"	31"	6"	22-5/8"	32"	6"
26"	12573	17961	21-15/16"	31"	6"	22-5/8"	32"	6"	23-5/16"	33"	6"	24"	34"	6"
28"	13540	19342	23-5/16"	33"	6"	24"	34"	6"	24-3/4"	35"	6"	25-1/2"	36"	6"
30"	14507	20724	24-3/4"	35"	6"	25-1/2"	36"	6"	26-3/16"	37"	6"	26-15/16"	38"	6"
32"	15474	22106	26-3/16"	37"	6"	26-15/16"	38"	6"	27-9/16"	39"	6"	28-5/16"	40"	6"
34"	16441	23487	27-9/16"	39"	6"	28-5/16"	40"	6"	29"	41"	6"	29-11/16"	42"	6"
36"	17408	24869	29"	41"	6"	29-11/16"	42"	6"	30-3/8"	43"	6"	31-1/8"	44"	6"
40"	19342	27632	31-13/16"	45"	6"	32-1/2"	46"	6"	33-1/4"	47"	6"	33-15/16"	48"	6"
42"	20310	29014	33-1/4"	47"	6"	33-15/16"	48"	6"	34-5/8"	49"	6"	35-3/8"	50"	6"