Results Summary

Kaimann Thermal Calculation Suite

Data entered by: Stuart Allely	Project ref: Specified Conditions 1

Mon Nov 17 2014 16:27:11 GMT+0000 (GMT Standard Time)

Ambient Temperature:	-6	°C
Line Temperature:	2	°C
Orientation:	Horizontal	
External Emissivity:	0.9	-
Wind Speed:	0	m/s
Minimum Freezing Time:	12	h
Freezing Point:	0	°C
Percent Frozen:	50	%

Calculated Thickness:

Steel		Kaiflex ST Class O (http://www.kaimann.com/products/benefits?sid=35)			
Pipe O.D	**Pipe N.B**	**Req. Thickness**	**Nom. Thickness**	**λ-Value**	**Item Code**
mm	**mm**	**mm**	**mm**	**W/(m²·K)**	**-**
17.2	14	39.1	39.1	0.0338	-
21.3	15	31.1	32	0.0338	ST-32x022
26.7	20	13.1	19	0.0339	ST-19x028
33.4	25	7.4	9	0.0339	ST-09x035
42.4	34	3	9	0.034	ST-09x042
48.3	40	1.6	9	0.0341	ST-09x048
60.3	50	0.3	9	0.0342	ST-09x060
76.1	70	0	13	0.0342	ST-13x076
88.9	80	0	13	0.0342	ST-13x089

114.3	100	0	3	0.0342	ST-03-E
141.3	125	0	3	0.0342	ST-03-E
168.3	150	0	3	0.0342	ST-03-E
219.1	200	0	3	0.0342	ST-03-E
273	250	0	3	0.0342	ST-03-E
323.9	300	0	3	0.0342	ST-03-E
355.6	350	0	3	0.0342	ST-03-E
406.4	400	0	3	0.0342	ST-03-E
457	450	0	3	0.0342	ST-03-E
508	500	0	3	0.0342	ST-03-E
610	600	0	3	0.0342	ST-03-E
660.4	641.4	0	3	0.0342	ST-03-E
711.2	692.2	0	3	0.0342	ST-03-E
762	743	0	3	0.0342	ST-03-E
812.8	793.8	0	3	0.0342	ST-03-E
863.6	844.6	0	3	0.0342	ST-03-E
914.4	895.4	0	3	0.0342	ST-03-E
1066.8	946.2	0	3	0.0342	ST-03-E
1117.6	1098.6	0	3	0.0342	ST-03-E
1498.6	1479.6	0	3	0.0342	ST-03-E
1524	1505	0	3	0.0342	ST-03-E

All thermal insulation calculations are made in accordance with EN ISO 12241 and other industry standard methods where applicable. These standardised methods may not take into account all variables and are highly reliant on the quality of the variables entered. As such results should be considered indicative only and Kaimann cannot be held liable for the use of recommendations given by this program alone.

Results Summary

Kaimann Thermal Calculation Suite

Data entered by: Stuart Allely	Project ref: Specified Conditions 2

Mon Nov 17 2014 16:27:11 GMT+0000 (GMT Standard Time)

Ambient Temperature:	-10	°C
Line Temperature:	2	°C
Orientation:	Horizontal	
External Emissivity:	0.9	-
Wind Speed:	0	m/s
Minimum Freezing Time:	12	h
Freezing Point:	0	°C
Percent Frozen:	50	%

Calculated Thickness:

Steel		Kaiflex ST Class O (http://www.kaimann.com/products/benefits?sid=35)			
Pipe O.D	**Pipe N.B**	**Req. Thickness**	**Nom. Thickness**	**λ-Value**	**Item Code**
mm	**mm**	**mm**	**mm**	**W/(m²·K)**	**-**
17.2	14	159.2	159.2	0.0336	-
21.3	15	105.5	105.5	0.0336	-
26.7	20	36	36	0.0336	-
33.4	25	19.3	25	0.0337	ST-25x035
42.4	34	9.1	13	0.0338	ST-13x042
48.3	40	6.1	9	0.0338	ST-09x048
60.3	50	3.5	9	0.0339	ST-09x060
76.1	70	0.8	13	0.0341	ST-13x076
88.9	80	0.2	13	0.0342	ST-13x089
114.3	100	0	3	0.0342	ST-03-E

141.3	125	0	3	0.0342	ST-03-E
168.3	150	0	3	0.0342	ST-03-E
219.1	200	0	3	0.0342	ST-03-E
273	250	0	3	0.0342	ST-03-E
323.9	300	0	3	0.0342	ST-03-E
355.6	350	0	3	0.0342	ST-03-E
406.4	400	0	3	0.0342	ST-03-E
457	450	0	3	0.0342	ST-03-E
508	500	0	3	0.0342	ST-03-E
610	600	0	3	0.0342	ST-03-E
660.4	641.4	0	3	0.0342	ST-03-E
711.2	692.2	0	3	0.0342	ST-03-E
762	743	0	3	0.0342	ST-03-E
812.8	793.8	0	3	0.0342	ST-03-E
863.6	844.6	0	3	0.0342	ST-03-E
914.4	895.4	0	3	0.0342	ST-03-E
1066.8	946.2	0	3	0.0342	ST-03-E
1117.6	1098.6	0	3	0.0342	ST-03-E
1498.6	1479.6	0	3	0.0342	ST-03-E
1524	1505	0	3	0.0342	ST-03-E