

BALMORAL TANKS

LPCB approved fire fighting water tanks

Technical guide



bafsa
British Automatic Fire Sprinkler Association




BRITISH WATER



 UK Designed and
manufactured



BALMORAL

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Balmoral fire fighting water storage tanks

For more than 120 years sprinkler systems have protected buildings and saved lives around the world. By preventing the spread of fire and providing safe escape routes, sprinkler systems are a tried and tested way of controlling and extinguishing fires.

Standard of construction for sprinkler tanks

It is essential that the water storage tank is of robust construction and is designed and constructed to need little maintenance or servicing. Balmoral sprinkler water storage tanks are built to a high standard that will provide a 10-year service life (a requirement for LPCB listing for systems that require a 'Superior' water supply) without any need for drainage and cleaning.

Where sprinkler systems are designed to the LPC Rules for Automatic Sprinkler Installations incorporating BS EN 12845:2009 the most commonly used water storage tanks have LPCB approval. LPCB listed tanks must comply with the rigorous manufacturing and test standard LPS 1276.



Cylindrical galvanised steel

This is the most common type of tank used for sprinkler systems. Construction is in galvanised steel panels that are bolted together to form a cylinder. A mastic seal is applied between each metal sheet or a butyl rubber or EDPM liner is fitted. The tanks are usually installed close to the protected premises on a prepared concrete base or occasionally inside the protected premises.

What duration of water should be provided?

BS EN 12845 Light Hazard	30 minutes
BS EN 12845 Ordinary Hazard	60 minutes
BS EN 12845 High Hazard	90 minutes
BS 9251 Residential	30 minutes
BS 9251 Domestic	10 minutes
Schools (TB221) OH1	30 minutes
Schools (TB221) OH2+3	60 minutes

Tank support base

The support base for the sprinkler tank will vary depending on the type of tank installed. The most common types are circular or rectangular concrete bases, low level concrete walls or steel beams.

Tank location

Whenever possible the sprinkler tank should be located within 5m of the sprinkler pump house. Areas to be avoided are:

- Near trees where roots could damage the tank base
- In areas where water can accumulate near the tank base and accelerate corrosion or undermine the tank base
- Near pipes or underground services where the weight of the tank may damage them
- Near hot or corrosive exhaust extracts/pipes where the tank's protective coating could be damaged

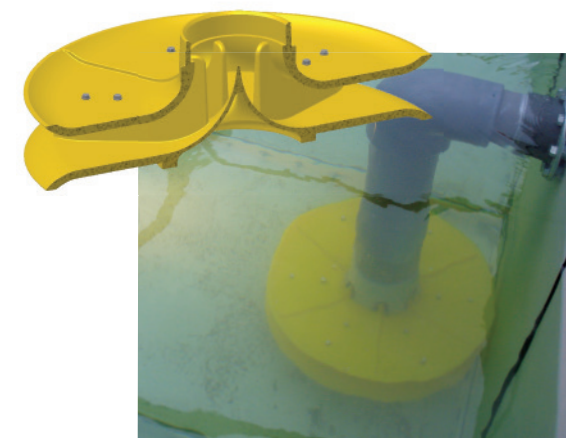
LPCB-approved Vortex inhibitor

Fire fighting water tanks require a large, fast flowing volume of water with a vortex inhibitor playing a key role in preventing air being drawn into the system and reducing the flow.

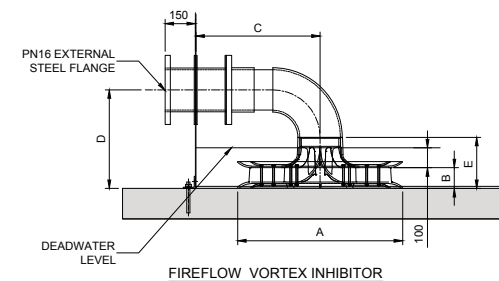
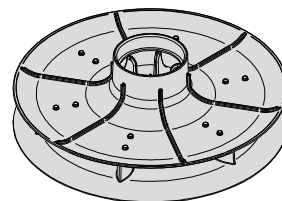
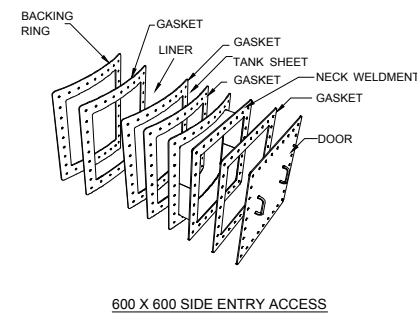
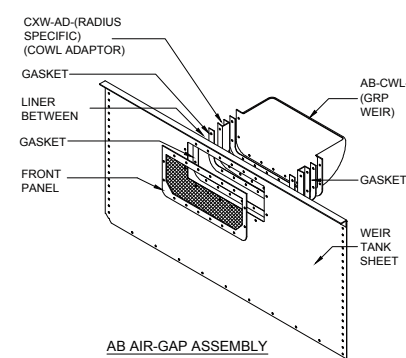
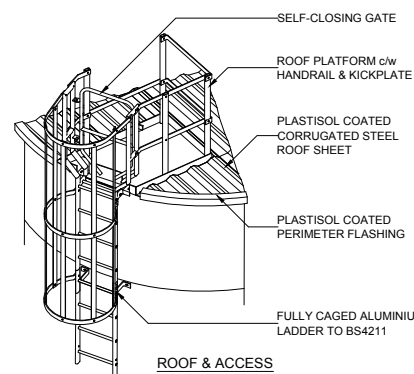
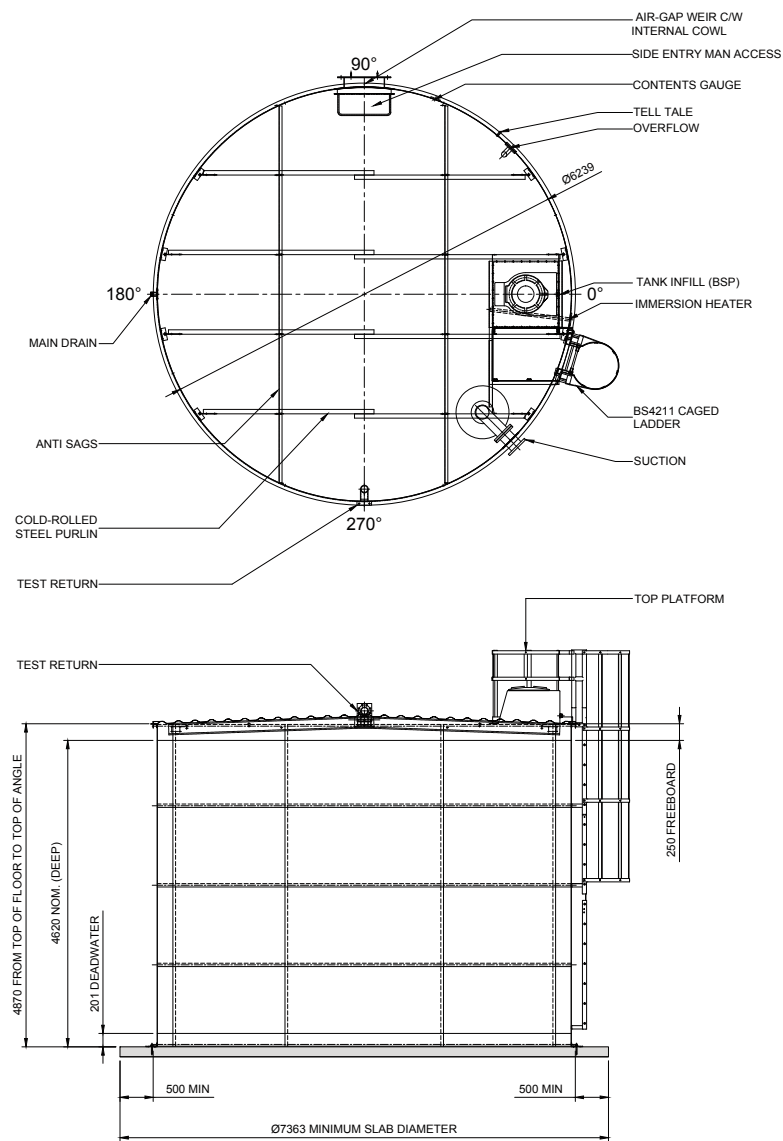
As LPCB standards require the usable water level to be no less than 100mm above the lowest suction point, the height of the vortex inhibitor also affects the usable capacity within a sprinkler tank.

Simple vortex inhibitors are available commercially; however Balmoral Tanks provides a significantly improved design which optimises both the capacity of the tank and the flow rate.

Balmoral's unique design fully meets the requirements of LPCB's LPS 2070 and BS EN 12845 standards, including pipe dimensions, flow rate and mechanical strength, but with the advantage of increasing the effective capacity of the tank and decreasing the suction loss through the vortex inhibitor by an industry-leading 30%.



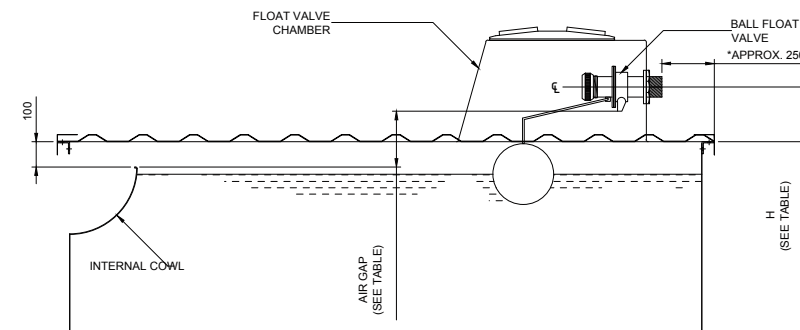
Cylindrical tank drawing and fitting assemblies



PIPE Ø	A	B	C	D MIN	D MAX	E
80	218	42	310	-	-	103
100	417	50	485	237	410	120
150	614	83	600	348	581	178
200	814	100	731	454	769	250
250	1014	126	866	533	918	271
300	1214	158	982	650	1107	326
350	1214	195	1006	730	1167	365
400	1214	185	1033	765	1182	355
450	1214	203	816	-	-	373

SIZE	AIR GAP	H (mm)
2"	127	120
3"	246	220
4"	273	270

* FOR PN16 ATTACHMENT APPROXIMATE DISTANCE BECOMES 150mm



100mm suction line capacity chart

Effective capacity m³

Sheets High	Sheets Round		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Freeboard		0.15m	0.15m	0.18m	0.22m	0.25m	0.25m	0.25m	0.32m	0.32m	0.32m	0.32m	0.35m	0.39m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m
	Tank Diameter		Ø3.1m	Ø3.9m	Ø4.7m	Ø5.5m	Ø6.2m	Ø7.0m	Ø7.8m	Ø8.6m	Ø9.4m	Ø10.1m	Ø10.9m	Ø11.7m	Ø12.5m	Ø13.3m	Ø14.0m	Ø14.8m	Ø15.6m	Ø16.4m	Ø17.2m	Ø17.9m	Ø18.7m
Tank Height																							
1	1.27	7.4	11.5	16.1	21.1	26.5	33.5	41.4	46.0	54.8	64.3	74.5	82.9	88.7	98.8	110.8	123.5	136.8	150.8	165.5	180.9	197.0	
1.25	1.53	9.4	14.7	20.7	27.2	34.5	43.7	53.9	61.2	72.8	85.4	99.1	111.1	120.8	135.1	151.4	168.7	187.0	206.1	226.2	247.3	269.2	
1.5	1.85	11.8	18.4	26.0	34.5	44.1	55.8	68.8	79.2	94.3	110.7	128.4	144.7	159.0	178.2	199.8	222.6	246.7	271.9	298.5	326.2	355.2	
1.75	2.16	14.2	22.2	31.5	41.9	53.7	67.9	83.9	97.4	116.0	136.1	157.8	178.5	197.5	221.7	248.5	276.9	306.9	338.3	371.3	405.8	441.9	
2	2.47	16.6	25.9	36.8	49.2	63.2	79.9	98.7	115.4	137.3	161.1	186.9	211.8	235.4	264.5	296.5	330.4	366.1	403.6	443.0	484.1	527.2	
2.25	2.73	18.6	29.0	41.3	55.3	71.2	90.1	111.2	130.5	155.3	182.3	211.4	240.0	267.5	300.7	337.2	375.7	416.2	458.9	503.6	550.5	599.4	
2.5	3.05	20.9	32.7	46.7	62.6	80.7	102.2	126.2	148.6	176.8	207.5	240.7	273.6	305.7	343.9	385.5	429.5	475.9	524.7	575.9	629.4	685.4	
2.75	3.36	23.4	36.5	52.1	70.0	90.4	114.4	141.2	166.8	198.5	233.0	270.2	307.5	344.2	387.4	434.3	483.9	536.1	591.1	648.7	709.0	772.0	
3	3.67	25.7	40.2	57.4	77.3	99.8	126.4	156.0	184.7	219.8	258.0	299.2	340.8	382.1	430.1	482.2	537.3	595.4	656.4	720.4	787.4	857.3	
3.25	3.93	27.7	43.3	61.9	83.4	107.9	136.5	168.5	199.9	237.9	279.2	323.8	369.0	414.2	466.4	522.9	582.6	645.5	711.7	781.1	853.7	929.5	
3.5	4.25	30.1	47.1	67.3	90.7	117.4	148.6	183.5	218.0	259.4	304.4	353.0	402.6	452.4	509.5	571.2	636.5	705.2	777.5	853.3	932.7	1015.5	
3.75	4.56	32.5	50.8	72.7	98.1	127.1	160.8	198.5	236.2	281.0	329.8	382.5	436.5	491.0	553.0	620.0	690.8	765.4	843.9	926.1	1012.3	1102.2	
4	4.87	34.9	54.5	78.1	105.3	136.5	172.8	213.3	254.1	302.4	354.9	411.6	469.8	528.9	595.8	668.0	744.2	824.6	909.2	997.8	1090.6	1187.5	
4.25	5.13	36.9	57.7	82.6	111.5	144.6	182.9	225.9	269.2	320.4	376.1	436.1	498.0	561.0	632.0	708.6	789.5	874.8	964.5	1058.5	1156.9	1259.7	
4.5	5.45	39.3	61.4	87.9	118.8	154.1	195.0	240.8	287.3	341.9	401.3	465.4	531.6	599.2	675.2	756.9	843.4	934.5	1030.3	1130.7	1235.9	1345.7	
4.75	5.76	41.7	65.2	93.4	126.2	163.7	207.2	255.8	305.5	363.6	426.7	494.9	565.4	637.7	718.7	805.7	897.7	994.7	1096.6	1203.6	1315.5		
5	6.07	44.1	68.9	98.7	133.4	173.2	219.2	270.6	323.4	384.9	451.7	523.9	598.7	675.6	761.5	853.7	951.2	1053.9	1161.9	1275.2			
5.25	6.33	46.1	72.0	103.2	139.6	181.2	229.4	283.2	338.6	403.0	472.9	548.5	627.0	707.7	797.7	894.3	996.4	1104.1	1217.2	1335.9			
5.5	6.65	48.5	75.7	108.6	146.9	190.8	241.5	298.1	356.7	424.5	498.2	577.7	660.5	745.9	840.8	942.7	1050.3	1163.8	1283.1				
5.75	6.96	50.9	79.5	114.0	154.3	200.4	253.7	313.2	374.9	446.1	523.6	607.2	694.4	784.4	884.3	991.4	1104.6	1224.0	1349.4				
6	7.27	53.2	83.2	119.3	161.5	209.9	265.7	328.0	392.8	467.5	548.6	636.3	727.7	822.3	927.1	1039.4	1158.1	1283.2					
6.25	7.53	55.2	86.3	123.8	167.7	217.9	275.8	340.5	408.0	485.5	569.8	660.8	755.9	854.4	963.3	1080.0	1203.3	1333.4					
6.5	7.85	57.6	90.1	129.2	175.0	227.5	287.9	355.4	426.0	507.0	595.0	690.1	789.5	892.7	1006.5	1128.4	1257.2						
6.75	8.16	60.0	93.8	134.6	182.4	237.1	300.1	370.5	444.2	528.7	620.5	719.6	823.4	931.2	1050.0	1177.1	1311.6						
7	8.47	62.4	97.5	140.0	189.6	246.6	312.1	385.3	462.1	550.0	645.5	748.6	856.7	969.1	1092.8	1225.1							
7.25	8.73	64.4	100.6	144.5	195.8	254.6	322.2	397.8	477.3	568.0	666.7	773.2	884.9	1001.2	1129.0	1265.7							
7.5	9.05	66.8	104.4	149.8	203.1	264.2	334.3	412.7	495.4	589.5	691.9	802.4	918.5	1039.4	1172.1	1314.1							
7.75	9.36	69.2	108.1	155.3	210.4	273.8	346.5	427.8	513.6	611.2	717.3	831.9	952.3	1077.9	1215.6								
8	9.67	71.6	111.8	160.6	217.7	283.3	358.5	442.6	531.5	632.5	742.3	860.9	985.6	1115.8	1258.4								
8.25	9.93	73.6	115.0	165.1	223.8	291.3	368.7	455.1	546.7	650.6	763.5	885.5	1013.9	1147.9	1294.7								
8.5	10.25	76.0	118.7	170.5	231.2	300.8	380.8	470.1	564.7	672.1	788.8	914.8	1047.4	1186.1	1337.8								
8.75	10.56	78.4	122.5	175.9	238.5	310.5	392.9	485.1	582.9	693.8	814.2	944.3	1081.3	1224.7									
9	10.87	80.8	126.2	181.2	245.8	320.0	404.9	499.9	600.9	715.1	839.2	973.3	1114.6	1262.6									
9.25	11.13	82.8	129.3	185.7	251.9	328.0	415.1	512.5	616.0	733.1	860.4	997.9	1142.8	1294.7									
9.5	11.45	85.1	133.0	191.1	259.2	337.5	427.2	527.4	634.1	754.6	885.6	1027.1	1176.4	1332.9									
9.75	11.76	87.6	136.8	196.5	266.6	347.2	439.4	542.4	652.3	776.3	911.1	1056.6	1210.3										
10	12.07	89.9	140.5	201.9	273.9	356.6	451.4	557.2	670.2	797.6	936.1	1085.6	1243.6										



150mm suction line capacity chart

Effective capacity m³

Sheets High	Sheets Round		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Freeboard		0.15m	0.15m	0.18m	0.22m	0.25m	0.25m	0.25m	0.32m	0.32m	0.32m	0.32m	0.35m	0.39m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m
	Tank Diameter		Ø3.1m	Ø3.9m	Ø4.7m	Ø5.5m	Ø6.2m	Ø7.0m	Ø7.8m	Ø8.6m	Ø9.4m	Ø10.1m	Ø10.9m	Ø11.7m	Ø12.5m	Ø13.3m	Ø14.0m	Ø14.8m	Ø15.6m	Ø16.4m	Ø17.2m	Ø17.9m	Ø18.7m
	Tank Height																						
1	1.27	7.2	11.2	15.7	20.5	25.7	32.5	40.2	44.6	53.0	62.2	72.2	80.2	85.6	95.4	106.9	119.2	132.0	145.6	159.8	174.6	190.1	
1.25	1.53	9.2	14.4	20.2	26.6	33.7	42.7	52.7	59.7	71.1	83.4	96.8	108.4	117.7	131.6	147.6	164.4	182.2	200.9	220.4	240.9	262.3	
1.5	1.85	11.6	18.1	25.6	34.0	43.3	54.8	67.6	77.8	92.6	108.7	126.0	142.0	155.9	174.8	195.9	218.3	241.9	266.7	292.7	319.9	348.3	
1.75	2.16	14.0	21.9	31.0	41.3	52.9	67.0	82.7	96.0	114.2	134.1	155.5	175.8	194.4	218.2	244.7	272.6	302.1	333.0	365.5	399.5	435.0	
2	2.47	16.4	25.6	36.4	48.6	62.4	79.0	97.5	113.9	135.6	159.1	184.5	209.1	232.3	261.0	292.7	326.1	361.3	398.3	437.2	477.8	520.3	
2.25	2.73	18.4	28.7	40.9	54.7	70.4	89.1	110.0	129.1	153.6	180.3	209.1	237.4	264.4	297.3	333.3	371.3	411.5	453.6	497.9	544.2	592.5	
2.5	3.05	20.8	32.4	46.2	62.0	80.0	101.2	125.0	147.2	175.1	205.5	238.4	270.9	302.6	340.4	381.6	425.2	471.2	519.5	570.1	623.1	678.5	
2.75	3.36	23.2	36.2	51.7	69.4	89.6	113.4	140.0	165.4	196.8	231.0	267.9	304.8	341.2	383.9	430.4	479.5	531.4	585.8	642.9	702.7	765.1	
3	3.67	25.5	39.9	57.0	76.7	99.1	125.4	154.8	183.3	218.1	256.0	296.9	338.1	379.1	426.7	478.4	533.0	590.6	651.1	714.6	781.0	850.4	
3.25	3.93	27.5	43.0	61.5	82.8	107.1	135.6	167.3	198.4	236.2	277.2	321.5	366.3	411.2	462.9	519.0	578.3	640.7	706.4	775.3	847.4	922.7	
3.5	4.25	29.9	46.8	66.9	90.1	116.7	147.6	182.3	216.5	257.7	302.4	350.7	399.9	449.4	506.1	567.4	632.2	700.4	772.2	847.5	926.3	1008.6	
3.75	4.56	32.3	50.5	72.3	97.5	126.3	159.8	197.3	234.7	279.3	327.8	380.2	433.8	487.9	549.6	616.1	686.5	760.6	838.6	920.4	1005.9	1095.3	
4	4.87	34.7	54.2	77.6	104.8	135.8	171.8	212.1	252.6	300.7	352.8	409.2	467.1	525.8	592.4	664.1	739.9	819.9	903.9	992.0	1084.3	1180.6	
4.25	5.13	36.7	57.4	82.1	110.9	143.8	182.0	224.7	267.8	318.7	374.0	433.8	495.3	557.9	628.6	704.7	785.2	870.0	959.2	1052.7	1150.6	1252.8	
4.5	5.45	39.1	61.1	87.5	118.2	153.3	194.1	239.6	285.9	340.2	399.3	463.1	528.9	596.1	671.7	753.1	839.1	929.7	1025.0	1125.0	1229.6	1338.8	
4.75	5.76	41.5	64.9	92.9	125.6	163.0	206.3	254.6	304.1	361.9	424.7	492.5	562.7	634.6	715.2	801.8	893.4	989.9	1091.4	1197.8	1309.2		
5	6.07	43.9	68.6	98.3	132.8	172.4	218.3	269.5	322.0	383.2	449.7	521.6	596.1	672.6	758.0	849.8	946.8	1049.1	1156.7	1269.5			
5.25	6.33	45.9	71.7	102.8	139.0	180.5	228.4	282.0	337.2	401.2	470.9	546.1	624.3	704.6	794.2	890.4	992.1	1099.3	1212.0	1330.1			
5.5	6.65	48.3	75.4	108.1	146.3	190.0	240.5	296.9	355.2	422.7	496.1	575.4	657.9	742.9	837.4	938.8	1046.0	1159.0	1277.8				
5.75	6.96	50.7	79.2	113.6	153.7	199.7	252.7	312.0	373.4	444.4	521.6	604.9	691.7	781.4	880.9	987.5	1100.3	1219.2	1344.2				
6	7.27	53.0	82.9	118.9	160.9	209.1	264.7	326.8	391.3	465.7	546.6	633.9	725.0	819.3	923.7	1035.5	1153.8	1278.4					
6.25	7.53	55.1	86.0	123.4	167.1	217.2	274.8	339.3	406.5	483.8	567.8	658.5	753.2	851.4	959.9	1076.1	1199.0	1328.6					
6.5	7.85	57.4	89.8	128.8	174.4	226.7	286.9	354.2	424.6	505.3	593.0	687.7	786.8	889.6	1003.0	1124.5	1252.9						
6.75	8.16	59.8	93.5	134.2	181.8	236.3	299.1	369.3	442.8	527.0	618.4	717.2	820.7	928.1	1046.5	1173.3	1307.2						
7	8.47	62.2	97.2	139.5	189.0	245.8	311.1	384.1	460.7	548.3	643.5	746.3	854.0	966.0	1089.3	1221.2							
7.25	8.73	64.2	100.4	144.0	195.2	253.8	321.3	396.6	475.9	566.3	664.7	770.8	882.2	998.1	1125.5	1261.9							
7.5	9.05	66.6	104.1	149.4	202.5	263.4	333.4	411.6	493.9	587.8	689.9	800.1	915.8	1036.3	1168.7	1310.2							
7.75	9.36	69.0	107.8	154.8	209.9	273.0	345.5	426.6	512.1	609.5	715.3	829.6	949.6	1074.9	1212.2								
8	9.67	71.4	111.5	160.2	217.1	282.5	357.5	441.4	530.1	630.8	740.3	858.6	983.0	1112.8	1255.0								
8.25	9.93	73.4	114.7	164.7	223.3	290.5	367.7	453.9	545.2	648.9	761.5	883.2	1011.2	1144.9	1291.2								
8.5	10.25	75.8	118.4	170.1	230.6	300.1	379.8	468.9	563.3	670.4	786.7	912.4	1044.8	1183.1	1334.3								
8.75	10.56	78.2	122.2	175.5	237.9	309.7	392.0	483.9	581.5	692.0	812.2	941.9	1078.6	1221.6									
9	10.87	80.6	125.9	180.8	245.2	319.2	404.0	498.7	599.4	713.4	837.2	971.0	1111.9	1259.5									
9.25	11.13	82.6	129.0	185.3	251.3	327.2	414.1	511.3	614.6	731.4	858.4	995.5	1140.1	1291.6									
9.5	11.45	85.0	132.7	190.7	258.7	336.8	426.2	526.2	632.6	752.9	883.6	1024.8	1173.7	1329.8									
9.75	11.76	87.4	136.5	196.1	266.0	346.4	438.4	541.2	650.9	774.6	909.0	1054.3	1207.6										
10	12.07	89.7	140.2	201.4	273.3	355.9	450.4	556.0	668.8	795.9	934.1	1083.3	1240.9										



200mm suction line capacity chart

Effective capacity m³

Sheets High	Tank Height	Sheets Round	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
		Freeboard	0.15m	0.15m	0.18m	0.22m	0.25m	0.25m	0.25m	0.32m	0.32m	0.32m	0.32m	0.35m	0.39m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m
		Tank Diameter	Ø3.1m	Ø3.9m	Ø4.7m	Ø5.5m	Ø6.2m	Ø7.0m	Ø7.8m	Ø8.6m	Ø9.4m	Ø10.1m	Ø10.9m	Ø11.7m	Ø12.5m	Ø13.3m	Ø14.0m	Ø14.8m	Ø15.6m	Ø16.4m	Ø17.2m	Ø17.9m	Ø18.7m
1	1.27	7.0	11.0	15.3	20.0	25.0	31.7	39.1	43.3	51.5	60.5	70.1	77.8	82.9	92.4	103.5	115.4	127.8	140.9	154.7	169.0	184.1	
1.25	1.53	9.0	14.1	19.9	26.1	33.1	41.8	51.7	58.5	69.6	81.7	94.7	106.0	115.0	128.6	144.2	160.6	178.0	196.2	215.4	235.4	256.3	
1.5	1.85	11.4	17.8	25.2	33.4	42.6	53.9	66.6	76.5	91.1	106.9	124.0	139.6	153.2	171.7	192.5	214.5	237.7	262.0	287.6	314.3	342.3	
1.75	2.16	13.8	21.6	30.6	40.8	52.2	66.1	81.6	94.7	112.7	132.3	153.4	173.5	191.7	215.2	241.3	268.8	297.9	328.4	360.4	393.9	428.9	
2	2.47	16.2	25.3	36.0	48.1	61.7	78.1	96.4	112.6	134.1	157.3	182.5	206.8	229.6	258.0	289.3	322.3	357.1	393.7	432.1	472.3	514.2	
2.25	2.73	18.2	28.4	40.5	54.2	69.7	88.3	109.0	127.8	152.1	178.5	207.0	235.0	261.7	294.2	329.9	367.5	407.3	449.0	492.8	538.6	586.4	
2.5	3.05	20.6	32.2	45.9	61.5	79.3	100.4	123.9	145.9	173.6	203.8	236.3	268.6	300.0	337.4	378.2	421.4	467.0	514.8	565.0	617.6	672.4	
2.75	3.36	23.0	35.9	51.3	68.9	88.9	112.6	139.0	164.1	195.3	229.2	265.8	302.4	338.5	380.9	427.0	475.8	527.1	581.2	637.9	697.2	759.1	
3	3.67	25.4	39.6	56.6	76.2	98.4	124.5	153.8	182.0	216.6	254.2	294.8	335.7	376.4	423.7	475.0	529.2	586.4	646.5	709.5	775.5	844.4	
3.25	3.93	27.4	42.8	61.1	82.3	106.4	134.7	166.3	197.2	234.7	275.4	319.4	364.0	408.5	459.9	515.6	574.5	636.5	701.8	770.2	841.8	916.6	
3.5	4.25	29.8	46.5	66.5	89.6	116.0	146.8	181.2	215.2	256.2	300.6	348.6	397.5	446.7	503.0	564.0	628.4	696.2	767.6	842.5	920.8	1002.6	
3.75	4.56	32.2	50.3	71.9	97.0	125.6	159.0	196.3	233.4	277.8	326.0	378.1	431.4	485.2	546.5	612.7	682.7	756.4	834.0	915.3	1000.4	1089.3	
4	4.87	34.5	54.0	77.2	104.2	135.1	171.0	211.1	251.4	299.1	351.1	407.2	464.7	523.1	589.3	660.7	736.1	815.7	899.3	986.9	1078.7	1174.5	
4.25	5.13	36.5	57.1	81.8	110.4	143.1	181.1	223.6	266.5	317.2	372.3	431.7	492.9	555.2	625.6	701.3	781.4	865.8	954.6	1047.6	1145.0	1246.8	
4.5	5.45	38.9	60.8	87.1	117.7	152.7	193.2	238.5	284.6	338.7	397.5	461.0	526.5	593.4	668.7	749.7	835.3	925.5	1020.4	1119.9	1224.0	1332.8	
4.75	5.76	41.3	64.6	92.5	125.1	162.3	205.4	253.6	302.8	360.4	422.9	490.5	560.4	632.0	712.2	798.4	889.6	985.7	1086.7	1192.7	1303.6		
5	6.07	43.7	68.3	97.9	132.3	171.8	217.4	268.4	320.7	381.7	447.9	519.5	593.7	669.9	755.0	846.4	943.1	1044.9	1152.0	1264.4			
5.25	6.33	45.7	71.4	102.4	138.5	179.8	227.6	280.9	335.9	399.7	469.1	544.1	621.9	702.0	791.2	887.0	988.3	1095.1	1207.3	1325.1			
5.5	6.65	48.1	75.2	107.8	145.8	189.4	239.7	295.9	354.0	421.2	494.4	573.3	655.5	740.2	834.3	935.4	1042.2	1154.8	1273.2				
5.75	6.96	50.5	78.9	113.2	153.2	199.0	251.8	310.9	372.2	442.9	519.8	602.8	689.3	778.7	877.8	984.1	1096.5	1215.0	1339.5				
6	7.27	52.9	82.6	118.5	160.4	208.5	263.8	325.7	390.1	464.2	544.8	631.9	722.7	816.6	920.6	1032.1	1150.0	1274.2					
6.25	7.53	54.9	85.8	123.0	166.6	216.5	274.0	338.3	405.2	482.3	566.0	656.4	750.9	848.7	956.9	1072.7	1195.2	1324.4					
6.5	7.85	57.3	89.5	128.4	173.9	226.0	286.1	353.2	423.3	503.8	591.2	685.7	784.5	886.9	1000.0	1121.1	1249.1						
6.75	8.16	59.7	93.3	133.8	181.3	235.7	298.3	368.2	441.5	525.4	616.7	715.2	818.3	925.4	1043.5	1169.9	1303.4						
7	8.47	62.1	97.0	139.1	188.5	245.1	310.3	383.0	459.4	546.8	641.7	744.2	851.6	963.3	1086.3	1217.8							
7.25	8.73	64.1	100.1	143.7	194.7	253.2	320.4	395.6	474.6	564.8	662.9	768.8	879.8	995.4	1122.5	1258.5							
7.5	9.05	66.4	103.8	149.0	202.0	262.7	332.5	410.5	492.7	586.3	688.1	798.0	913.4	1033.6	1165.7	1306.8							
7.75	9.36	68.9	107.6	154.5	209.3	272.4	344.7	425.6	510.9	608.0	713.5	827.5	947.3	1072.2	1209.1								
8	9.67	71.2	111.3	159.8	216.6	281.8	356.7	440.4	528.8	629.3	738.6	856.5	980.6	1110.1	1251.9								
8.25	9.93	73.2	114.4	164.3	222.7	289.9	366.8	452.9	544.0	647.4	759.7	881.1	1008.8	1142.2	1288.2								
8.5	10.25	75.6	118.2	169.7	230.1	299.4	378.9	467.8	562.0	668.9	785.0	910.4	1042.4	1180.4	1331.3								
8.75	10.56	78.0	121.9	175.1	237.4	309.0	391.1	482.9	580.2	690.5	810.4	939.9	1076.2	1218.9									
9	10.87	80.4	125.6	180.4	244.7	318.5	403.1	497.7	598.1	711.8	835.4	968.9	1109.6	1256.8									
9.25	11.13	82.4	128.7	184.9	250.8	326.5	413.3	510.2	613.3	729.9	856.6	993.5	1137.8	1288.9									
9.5	11.45	84.8	132.5	190.3	258.1	336.1	425.4	525.1	631.4	751.4	881.8	1022.7	1171.4	1327.1									
9.75	11.76	87.2	136.2	195.7	265.5	345.7	437.6	540.2	649.6	773.1	907.3	1052.2	1205.2										
10	12.07	89.6	139.9	201.1	272.8	355.2	449.5	555.0	667.5	794.4	932.3	1081.2	1238.5										

250mm suction line capacity chart

Effective capacity m³

	Sheets Round	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Freeboard	0.15m	0.15m	0.18m	0.22m	0.25m	0.25m	0.25m	0.32m	0.32m	0.32m	0.32m	0.35m	0.39m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m
	Tank Diameter	Ø3.1m	Ø3.9m	Ø4.7m	Ø5.5m	Ø6.2m	Ø7.0m	Ø7.8m	Ø8.6m	Ø9.4m	Ø10.1m	Ø10.9m	Ø11.7m	Ø12.5m	Ø13.3m	Ø14.0m	Ø14.8m	Ø15.6m	Ø16.4m	Ø17.2m	Ø17.9m	Ø18.7m
Sheets High	Tank Height																					
1	1.27	6.8	10.6	14.8	19.3	24.2	30.6	37.7	41.6	49.5	58.1	67.4	74.7	79.4	88.3	99.0	110.4	122.3	134.8	148.0	161.7	176.1
1.25	1.53	8.8	13.8	19.4	25.5	32.2	40.7	50.3	56.8	67.6	79.3	92.0	102.9	111.5	124.6	139.7	155.6	172.4	190.1	208.6	228.0	248.3
1.5	1.85	11.2	17.5	24.7	32.8	41.7	52.8	65.2	74.8	89.1	104.5	121.2	136.5	149.7	167.7	188.0	209.5	232.1	255.9	280.9	307.0	334.3
1.75	2.16	13.6	21.3	30.1	40.1	51.4	65.0	80.2	93.1	110.7	130.0	150.7	170.3	188.2	211.2	236.8	263.8	292.3	322.3	353.7	386.6	421.0
2	2.47	16.0	25.0	35.5	47.4	60.8	77.0	95.1	111.0	132.1	155.0	179.8	203.7	226.1	254.0	284.8	317.3	351.6	387.6	425.4	464.9	506.2
2.25	2.73	18.0	28.1	40.0	53.5	68.9	87.2	107.6	126.1	150.1	176.2	204.3	231.9	258.2	290.2	325.4	362.5	401.7	442.9	486.1	531.3	578.5
2.5	3.05	20.4	31.8	45.4	60.9	78.4	99.2	122.5	144.2	171.6	201.4	233.6	265.5	296.4	333.4	373.8	416.4	461.4	508.7	558.3	610.2	664.4
2.75	3.36	22.8	35.6	50.8	68.2	88.0	111.4	137.6	162.4	193.3	226.8	263.1	299.3	334.9	376.9	422.5	470.8	521.6	575.1	631.1	689.8	751.1
3	3.67	25.1	39.3	56.1	75.5	97.5	123.4	152.4	180.3	214.6	251.9	292.1	332.6	372.8	419.7	470.5	524.2	580.8	640.4	702.8	768.2	836.4
3.25	3.93	27.2	42.4	60.6	81.6	105.5	133.6	164.9	195.5	232.7	273.1	316.7	360.8	404.9	455.9	511.1	569.5	631.0	695.7	763.5	834.5	908.6
3.5	4.25	29.5	46.2	66.0	88.9	115.1	145.7	179.8	213.6	254.2	298.3	345.9	394.4	443.1	499.0	559.5	623.4	690.7	761.5	835.7	913.5	994.6
3.75	4.56	31.9	49.9	71.4	96.3	124.7	157.9	194.9	231.8	275.8	323.7	375.4	428.3	481.7	542.5	608.2	677.7	750.9	827.9	908.6	993.0	1081.3
4	4.87	34.3	53.6	76.7	103.6	134.2	169.9	209.7	249.7	297.1	348.7	404.4	461.6	519.6	585.3	656.2	731.1	810.1	893.2	980.2	1071.4	1166.6
4.25	5.13	36.3	56.8	81.3	109.7	142.2	180.0	222.2	264.9	315.2	369.9	429.0	489.8	551.7	621.5	696.8	776.4	860.3	948.5	1040.9	1137.7	1238.8
4.5	5.45	38.7	60.5	86.6	117.0	151.8	192.1	237.2	282.9	336.7	395.1	458.3	523.4	589.9	664.7	745.2	830.3	920.0	1014.3	1113.2	1216.7	1324.8
4.75	5.76	41.1	64.2	92.0	124.4	161.4	204.3	252.2	301.1	358.4	420.6	487.8	557.3	628.4	708.2	793.9	884.6	980.2	1080.6	1186.0	1296.3	
5	6.07	43.5	67.9	97.4	131.7	170.9	216.3	267.0	319.0	379.7	445.6	516.8	590.6	666.3	751.0	841.9	938.1	1039.4	1145.9	1257.7	1374.6	
5.25	6.33	45.5	71.1	101.9	137.8	178.9	226.4	279.6	334.2	397.7	466.8	541.4	618.8	698.4	787.2	882.5	983.3	1089.6	1201.2	1318.4		
5.5	6.65	47.9	74.8	107.3	145.1	188.5	238.5	294.5	352.3	419.2	492.0	570.6	652.4	736.6	830.3	930.9	1037.2	1149.3	1267.1			
5.75	6.96	50.3	78.6	112.7	152.5	198.1	250.7	309.5	370.5	440.9	517.4	600.1	686.2	775.1	873.8	979.7	1091.5	1209.4	1333.4			
6	7.27	52.7	82.3	118.0	159.7	207.6	262.7	324.3	388.4	462.2	542.5	629.1	719.5	813.1	916.6	1027.6	1145.0	1268.7				
6.25	7.53	54.7	85.4	122.5	165.9	215.6	272.9	336.9	403.6	480.3	563.7	653.7	747.8	845.2	952.9	1068.3	1190.2	1318.8				
6.5	7.85	57.1	89.1	127.9	173.2	225.2	285.0	351.8	421.6	501.8	588.9	683.0	781.3	883.4	996.0	1116.6	1244.1					
6.75	8.16	59.5	92.9	133.3	180.6	234.8	297.1	366.8	439.8	523.4	614.3	712.5	815.2	921.9	1039.5	1165.4	1298.4					
7	8.47	61.8	96.6	138.7	187.8	244.3	309.1	381.7	457.8	544.8	639.3	741.5	848.5	959.8	1082.3	1213.3	1351.9					
7.25	8.73	63.8	99.7	143.2	194.0	252.3	319.3	394.2	472.9	562.8	660.5	766.1	876.7	991.9	1118.5	1254.0						
7.5	9.05	66.2	103.5	148.5	201.3	261.8	331.4	409.1	491.0	584.3	685.8	795.3	910.3	1030.1	1161.6	1302.3						
7.75	9.36	68.6	107.2	154.0	208.7	271.5	343.6	424.2	509.2	606.0	711.2	824.8	944.2	1068.6	1205.1							
8	9.67	71.0	110.9	159.3	215.9	280.9	355.6	439.0	527.1	627.3	736.2	853.8	977.5	1106.5	1247.9							
8.25	9.93	73.0	114.1	163.8	222.1	289.0	365.7	451.5	542.3	645.4	757.4	878.4	1005.7	1138.6	1284.2							
8.5	10.25	75.4	117.8	169.2	229.4	298.5	377.8	466.4	560.3	666.9	782.6	907.7	1039.3	1176.8	1327.3							
8.75	10.56	77.8	121.6	174.6	236.7	308.2	390.0	481.5	578.6	688.5	808.1	937.2	1073.1	1215.4								
9	10.87	80.2	125.3	179.9	244.0	317.6	402.0	496.3	596.5	709.8	833.1	966.2	1106.4	1253.3								
9.25	11.13	82.2	128.4	184.4	250.1	325.7	412.2	508.8	611.6	727.9	854.3	990.8	1134.7	1285.4								
9.5	11.45	84.6	132.1	189.8	257.5	335.2	424.2	523.8	629.7	749.4	879.5	1020.0	1168.2	1323.6								
9.75	11.76	87.0	135.9	195.2	264.8	344.8	436.4	538.8	647.9	771.1	904.9	1049.5	1202.1									
10	12.07	89.3	139.6	200.6	272.1	354.3	448.4	553.6	665.8	792.4	930.0	1078.5	1235.4									

300mm suction line capacity chart

Effective capacity m³

Sheets High	Sheets Round		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Freeboard		0.15m	0.15m	0.18m	0.22m	0.25m	0.25m	0.25m	0.32m	0.32m	0.32m	0.32m	0.35m	0.39m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m
	Tank Diameter		Ø3.1m	Ø3.9m	Ø4.7m	Ø5.5m	Ø6.2m	Ø7.0m	Ø7.8m	Ø8.6m	Ø9.4m	Ø10.1m	Ø10.9m	Ø11.7m	Ø12.5m	Ø13.3m	Ø14.0m	Ø14.8m	Ø15.6m	Ø16.4m	Ø17.2m	Ø17.9m	Ø18.7m
	Tank Height																						
1	1.27	6.6	10.3	14.4	18.7	23.4	29.6	36.5	40.2	47.8	56.1	65.1	72.0	76.3	84.9	95.2	106.0	117.5	129.5	142.2	155.4	169.2	
1.25	1.53	8.6	13.5	18.9	24.9	31.4	39.8	49.1	55.3	65.9	77.3	89.6	100.2	108.4	121.1	135.8	151.3	167.7	184.8	202.9	221.7	241.4	
1.5	1.85	11.0	17.2	24.3	32.2	41.0	51.8	64.0	73.4	87.4	102.5	118.9	133.8	146.6	164.3	184.2	205.2	227.4	250.7	275.1	300.7	327.4	
1.75	2.16	13.4	21.0	29.7	39.6	50.6	64.0	79.1	91.6	109.0	127.9	148.4	167.7	185.1	207.8	232.9	259.5	287.6	317.0	347.9	380.3	414.1	
2	2.47	15.8	24.7	35.0	46.8	60.1	76.0	93.9	109.5	130.3	153.0	177.4	201.0	223.0	250.6	280.9	313.0	346.8	382.3	419.6	458.6	499.4	
2.25	2.73	17.8	27.8	39.6	53.0	68.1	86.2	106.4	124.7	148.4	174.2	202.0	229.2	255.1	286.8	321.5	358.2	396.9	437.6	480.3	525.0	571.6	
2.5	3.05	20.2	31.5	44.9	60.3	77.6	98.3	121.3	142.8	169.9	199.4	231.2	262.8	293.4	329.9	369.9	412.1	456.6	503.5	552.5	603.9	657.6	
2.75	3.36	22.6	35.3	50.3	67.6	87.3	110.5	136.4	161.0	191.6	224.8	260.7	296.6	331.9	373.4	418.6	466.4	516.8	569.8	625.4	683.5	744.2	
3	3.67	25.0	39.0	55.7	74.9	96.8	122.5	151.2	178.9	212.9	249.8	289.8	329.9	369.8	416.2	466.6	519.9	576.1	635.1	697.0	761.8	829.5	
3.25	3.93	27.0	42.1	60.2	81.0	104.8	132.6	163.7	194.1	230.9	271.0	314.3	358.2	401.9	452.4	507.2	565.2	626.2	690.4	757.7	828.2	901.8	
3.5	4.25	29.3	45.9	65.6	88.4	114.3	144.7	178.6	212.1	252.4	296.3	343.6	391.7	440.1	495.6	555.6	619.0	685.9	756.2	830.0	907.1	987.7	
3.75	4.56	31.8	49.6	71.0	95.7	124.0	156.9	193.7	230.3	274.1	321.7	373.1	425.6	478.6	539.1	604.3	673.4	746.1	822.6	902.8	986.7	1074.4	
4	4.87	34.1	53.3	76.3	103.0	133.4	168.9	208.5	248.2	295.4	346.7	402.1	458.9	516.5	581.9	652.3	726.8	805.3	887.9	974.5	1065.1	1159.7	
4.25	5.13	36.1	56.5	80.8	109.1	141.5	179.0	221.0	263.4	313.5	367.9	426.7	487.1	548.6	618.1	693.0	772.1	855.5	943.2	1035.1	1131.4	1231.9	
4.5	5.45	38.5	60.2	86.2	116.4	151.0	191.1	236.0	281.5	335.0	393.1	455.9	520.7	586.8	661.2	741.3	826.0	915.2	1009.0	1107.4	1210.4	1317.9	
4.75	5.76	40.9	63.9	91.6	123.8	160.6	203.3	251.0	299.7	356.6	418.6	485.4	554.6	625.3	704.7	790.1	880.3	975.4	1075.4	1180.2	1290.0		
5	6.07	43.3	67.6	97.0	131.1	170.1	215.3	265.8	317.6	378.0	443.6	514.5	587.9	663.3	747.5	838.0	933.7	1034.6	1140.7	1251.9	1368.3		
5.25	6.33	45.3	70.8	101.5	137.2	178.1	225.5	278.4	332.8	396.0	464.8	539.0	616.1	695.4	783.7	878.7	979.0	1084.8	1196.0	1312.6			
5.5	6.65	47.7	74.5	106.8	144.5	187.7	237.6	293.3	350.8	417.5	490.0	568.3	649.7	733.6	826.9	927.0	1032.9	1144.5	1261.8				
5.75	6.96	50.1	78.3	112.3	151.9	197.3	249.7	308.3	369.0	439.2	515.4	597.8	683.5	772.1	870.4	975.8	1087.2	1204.7	1328.1				
6	7.27	52.5	82.0	117.6	159.2	206.8	261.7	323.1	387.0	460.5	540.5	626.8	716.9	810.0	913.2	1023.8	1140.7	1263.9					
6.25	7.53	54.5	85.1	122.1	165.3	214.8	271.9	335.7	402.1	478.6	561.6	651.4	745.1	842.1	949.4	1064.4	1185.9	1314.1					
6.5	7.85	56.9	88.8	127.5	172.6	224.4	284.0	350.6	420.2	500.1	586.9	680.6	778.7	880.3	992.5	1112.7	1239.8						
6.75	8.16	59.3	92.6	132.9	180.0	234.0	296.2	365.7	438.4	521.7	612.3	710.1	812.5	918.8	1036.0	1161.5	1294.1						
7	8.47	61.6	96.3	138.2	187.2	243.5	308.2	380.5	456.3	543.0	637.3	739.1	845.8	956.7	1078.8	1209.5	1347.6						
7.25	8.73	63.6	99.4	142.7	193.4	251.5	318.3	393.0	471.5	561.1	658.5	763.7	874.0	988.8	1115.1	1250.1							
7.5	9.05	66.0	103.2	148.1	200.7	261.1	330.4	407.9	489.5	582.6	683.7	793.0	907.6	1027.0	1158.2	1298.5							
7.75	9.36	68.4	106.9	153.5	208.1	270.7	342.6	423.0	507.7	604.3	709.2	822.5	941.5	1065.6	1201.7	1347.2							
8	9.67	70.8	110.6	158.9	215.3	280.2	354.6	437.8	525.7	625.6	734.2	851.5	974.8	1103.5	1244.5								
8.25	9.93	72.8	113.8	163.4	221.5	288.2	364.8	450.3	540.8	643.6	755.4	876.1	1003.0	1135.6	1280.7								
8.5	10.25	75.2	117.5	168.7	228.8	297.8	376.8	465.2	558.9	665.1	780.6	905.3	1036.6	1173.8	1323.8								
8.75	10.56	77.6	121.3	174.2	236.2	307.4	389.0	480.3	577.1	686.8	806.0	934.8	1070.4	1212.3									
9	10.87	80.0	125.0	179.5	243.4	316.9	401.0	495.1	595.0	708.1	831.1	963.8	1103.8	1250.2									
9.25	11.13	82.0	128.1	184.0	249.6	324.9	411.2	507.6	610.2	726.2	852.3	988.4	1132.0	1282.3									
9.5	11.45	84.4	131.8	189.4	256.9	334.4	423.3	522.6	628.3	747.7	877.5	1017.7	1165.6	1320.5									
9.75	11.76	86.8	135.6	194.8	264.2	344.1	435.5	537.6	646.5	769.3	902.9	1047.2	1199.4										
10	12.07	89.2	139.3	200.1	271.5	353.5	447.5	552.4	664.4	790.7	927.9	1076.2	1232.7										



350mm suction line capacity chart

Effective capacity m³

	Sheets Round	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Freeboard	0.15m	0.15m	0.18m	0.22m	0.25m	0.25m	0.25m	0.32m	0.32m	0.32m	0.32m	0.35m	0.39m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m
	Tank Diameter	Ø3.1m	Ø3.9m	Ø4.7m	Ø5.5m	Ø6.2m	Ø7.0m	Ø7.8m	Ø8.6m	Ø9.4m	Ø10.1m	Ø10.9m	Ø11.7m	Ø12.5m	Ø13.3m	Ø14.0m	Ø14.8m	Ø15.6m	Ø16.4m	Ø17.2m	Ø17.9m	Ø18.7m
Sheets High	Tank Height																					
1	1.27	6.3	9.9	13.8	17.9	22.3	28.2	34.8	38.1	45.3	53.2	61.7	68.1	71.9	79.9	89.6	99.8	110.6	122.0	133.9	146.3	159.3
1.25	1.53	8.3	13.0	18.3	24.0	30.3	38.4	47.4	53.3	63.4	74.4	86.3	96.4	104.0	116.2	130.2	145.1	160.8	177.3	194.5	212.6	231.5
1.5	1.85	10.7	16.8	23.7	31.3	39.9	50.5	62.3	71.3	84.9	99.6	115.5	129.9	142.2	159.3	178.6	199.0	220.5	243.1	266.8	291.6	317.5
1.75	2.16	13.1	20.5	29.1	38.7	49.5	62.6	77.3	89.5	106.5	125.0	145.0	163.8	180.7	202.8	227.3	253.3	280.7	309.4	339.6	371.2	404.2
2	2.47	15.5	24.2	34.4	46.0	59.0	74.6	92.1	107.4	127.9	150.1	174.0	197.1	218.6	245.6	275.3	306.8	339.9	374.7	411.3	449.5	489.5
2.25	2.73	17.5	27.4	38.9	52.1	67.0	84.8	104.7	122.6	145.9	171.3	198.6	225.3	250.7	281.8	315.9	352.0	390.1	430.0	472.0	515.9	561.7
2.5	3.05	19.9	31.1	44.3	59.4	76.5	96.9	119.6	140.7	167.4	196.5	227.9	258.9	289.0	325.0	364.3	405.9	449.8	495.9	544.2	594.8	647.7
2.75	3.36	22.3	34.9	49.7	66.8	86.2	109.1	134.7	158.9	189.1	221.9	257.4	292.8	327.5	368.4	413.1	460.2	510.0	562.2	617.0	674.4	734.3
3	3.67	24.7	38.6	55.1	74.1	95.7	121.1	149.5	176.8	210.4	246.9	286.4	326.1	365.4	411.2	461.0	513.7	569.2	627.5	688.7	752.7	819.6
3.25	3.93	26.7	41.7	59.6	80.2	103.7	131.2	162.0	192.0	228.5	268.1	311.0	354.3	397.5	447.5	501.7	559.0	619.3	682.8	749.4	819.1	891.8
3.5	4.25	29.1	45.4	64.9	87.5	113.2	143.3	176.9	210.0	250.0	293.4	340.2	387.9	435.7	490.6	550.0	612.8	679.0	748.6	821.6	898.0	977.8
3.75	4.56	31.5	49.2	70.4	94.9	122.9	155.5	192.0	228.2	271.6	318.8	369.7	421.7	474.2	534.1	598.8	667.2	739.2	815.0	894.5	977.6	1064.5
4	4.87	33.8	52.9	75.7	102.1	132.3	167.5	206.8	246.2	292.9	343.8	398.7	455.0	512.1	576.9	646.8	720.6	798.5	880.3	966.1	1056.0	1149.8
4.25	5.13	35.9	56.0	80.2	108.3	140.4	177.6	219.3	261.3	311.0	365.0	423.3	483.3	544.2	613.1	687.4	765.9	848.6	935.6	1026.8	1122.3	1222.0
4.5	5.45	38.2	59.8	85.6	115.6	149.9	189.7	234.2	279.4	332.5	390.2	452.6	516.8	582.4	656.3	735.7	819.8	908.3	1001.4	1099.1	1201.3	1308.0
4.75	5.76	40.7	63.5	91.0	123.0	159.5	201.9	249.3	297.6	354.2	415.7	482.1	550.7	620.9	699.7	784.5	874.1	968.5	1067.8	1171.9	1280.9	
5	6.07	43.0	67.2	96.3	130.2	169.0	213.9	264.1	315.5	375.5	440.7	511.1	584.0	658.9	742.5	832.5	927.5	1027.7	1133.1	1243.6	1359.2	
5.25	6.33	45.0	70.4	100.8	136.4	177.0	224.1	276.6	330.7	393.5	461.9	535.7	612.2	691.0	778.8	873.1	972.8	1077.9	1188.4	1304.3		
5.5	6.65	47.4	74.1	106.2	143.7	186.6	236.2	291.6	348.7	415.0	487.1	564.9	645.8	729.2	821.9	921.5	1026.7	1137.6	1254.2			
5.75	6.96	49.8	77.8	111.6	151.1	196.2	248.4	306.6	367.0	436.7	512.5	594.4	679.7	767.7	865.4	970.2	1081.0	1197.8	1320.6			
6	7.27	52.2	81.5	117.0	158.3	205.7	260.4	321.4	384.9	458.0	537.5	623.4	713.0	805.6	908.2	1018.2	1134.5	1257.0				
6.25	7.53	54.2	84.7	121.5	164.5	213.7	270.5	334.0	400.0	476.1	558.7	648.0	741.2	837.7	944.4	1058.8	1179.7	1307.2				
6.5	7.85	56.6	88.4	126.9	171.8	223.3	282.6	348.9	418.1	497.6	584.0	677.3	774.8	875.9	987.6	1107.2	1233.6					
6.75	8.16	59.0	92.2	132.3	179.1	232.9	294.8	363.9	436.3	519.2	609.4	706.8	808.6	914.4	1031.1	1155.9	1287.9					
7	8.47	61.4	95.9	137.6	186.4	242.4	306.8	378.7	454.2	540.6	634.4	735.8	842.0	952.3	1073.9	1203.9	1341.4					
7.25	8.73	63.4	99.0	142.1	192.5	250.4	316.9	391.3	469.4	558.6	655.6	760.4	870.2	984.4	1110.1	1244.5						
7.5	9.05	65.8	102.7	147.5	199.9	260.0	329.0	406.2	487.5	580.1	680.8	789.6	903.8	1022.6	1153.2	1292.9						
7.75	9.36	68.2	106.5	152.9	207.2	269.6	341.2	421.3	505.7	601.8	706.3	819.1	937.6	1061.2	1196.7	1341.6						
8	9.67	70.5	110.2	158.2	214.5	279.1	353.2	436.1	523.6	623.1	731.3	848.1	970.9	1099.1	1239.5							
8.25	9.93	72.5	113.3	162.8	220.6	287.1	363.4	448.6	538.8	641.2	752.5	872.7	999.1	1131.2	1275.7							
8.5	10.25	74.9	117.1	168.1	227.9	296.7	375.5	463.5	556.8	662.7	777.7	902.0	1032.7	1169.4	1318.9							
8.75	10.56	77.3	120.8	173.5	235.3	306.3	387.6	478.6	575.0	684.3	803.1	931.4	1066.6	1207.9								
9	10.87	79.7	124.5	178.9	242.6	315.8	399.6	493.4	592.9	705.7	828.2	960.5	1099.9	1245.8								
9.25	11.13	81.7	127.7	183.4	248.7	323.8	409.8	505.9	608.1	723.7	849.3	985.0	1128.1	1277.9								
9.5	11.45	84.1	131.4	188.8	256.0	333.3	421.9	520.8	626.2	745.2	874.6	1014.3	1161.7	1316.1								
9.75	11.76	86.5	135.2	194.2	263.4	343.0	434.1	535.9	644.4	766.9	900.0	1043.8	1195.5									
10	12.07	88.9	138.9	199.5	270.7	352.4	446.1	550.7	662.3	788.2	925.0	1072.8										

400mm suction line capacity chart

Effective capacity m³

		Sheets Round	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
		Freeboard	0.15m	0.15m	0.18m	0.22m	0.25m	0.25m	0.25m	0.32m	0.32m	0.32m	0.32m	0.35m	0.39m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m
		Tank Diameter	Ø3.1m	Ø3.9m	Ø4.7m	Ø5.5m	Ø6.2m	Ø7.0m	Ø7.8m	Ø8.6m	Ø9.4m	Ø10.1m	Ø10.9m	Ø11.7m	Ø12.5m	Ø13.3m	Ø14.0m	Ø14.8m	Ø15.6m	Ø16.4m	Ø17.2m	Ø17.9m	Ø18.7m
Sheets High	Tank Height																						
1	1.27	6.3	9.9	13.8	17.9	22.3	28.2	34.8	38.1	45.3	53.2	61.7	68.1	71.9	79.9	89.6	99.8	110.6	122.0	133.9	146.3	159.3	
1.25	1.53	8.3	13.0	18.3	24.0	30.3	38.4	47.4	53.3	63.4	74.4	86.3	96.4	104.0	116.2	130.2	145.1	160.8	177.3	194.5	212.6	231.5	
1.5	1.85	10.7	16.8	23.7	31.3	39.9	50.5	62.3	71.3	84.9	99.6	115.5	129.9	142.2	159.3	178.6	199.0	220.5	243.1	266.8	291.6	317.5	
1.75	2.16	13.1	20.5	29.1	38.7	49.5	62.6	77.3	89.5	106.5	125.0	145.0	163.8	180.7	202.8	227.3	253.3	280.7	309.4	339.6	371.2	404.2	
2	2.47	15.5	24.2	34.4	46.0	59.0	74.6	92.1	107.4	127.9	150.1	174.0	197.1	218.6	245.6	275.3	306.8	339.9	374.7	411.3	449.5	489.5	
2.25	2.73	17.5	27.4	38.9	52.1	67.0	84.8	104.7	122.6	145.9	171.3	198.6	225.3	250.7	281.8	315.9	352.0	390.1	430.0	472.0	515.9	561.7	
2.5	3.05	19.9	31.1	44.3	59.4	76.5	96.9	119.6	140.7	167.4	196.5	227.9	258.9	289.0	325.0	364.3	405.9	449.8	495.9	544.2	594.8	647.7	
2.75	3.36	22.3	34.9	49.7	66.8	86.2	109.1	134.7	158.9	189.1	221.9	257.4	292.8	327.5	368.4	413.1	460.2	510.0	562.2	617.0	674.4	734.3	
3	3.67	24.7	38.6	55.1	74.1	95.7	121.1	149.5	176.8	210.4	246.9	286.4	326.1	365.4	411.2	461.0	513.7	569.2	627.5	688.7	752.7	819.6	
3.25	3.93	26.7	41.7	59.6	80.2	103.7	131.2	162.0	192.0	228.5	268.1	311.0	354.3	397.5	447.5	501.7	559.0	619.3	682.8	749.4	819.1	891.8	
3.5	4.25	29.1	45.4	64.9	87.5	113.2	143.3	176.9	210.0	250.0	293.4	340.2	387.9	435.7	490.6	550.0	612.8	679.0	748.6	821.6	898.0	977.8	
3.75	4.56	31.5	49.2	70.4	94.9	122.9	155.5	192.0	228.2	271.6	318.8	369.7	421.7	474.2	534.1	598.8	667.2	739.2	815.0	894.5	977.6	1064.5	
4	4.87	33.8	52.9	75.7	102.1	132.3	167.5	206.8	246.2	292.9	343.8	398.7	455.0	512.1	576.9	646.8	720.6	798.5	880.3	966.1	1056.0	1149.8	
4.25	5.13	35.9	56.0	80.2	108.3	140.4	177.6	219.3	261.3	311.0	365.0	423.3	483.3	544.2	613.1	687.4	765.9	848.6	935.6	1026.8	1122.3	1222.0	
4.5	5.45	38.2	59.8	85.6	115.6	149.9	189.7	234.2	279.4	332.5	390.2	452.6	516.8	582.4	656.3	735.7	819.8	908.3	1001.4	1099.1	1201.3	1308.0	
4.75	5.76	40.7	63.5	91.0	123.0	159.5	201.9	249.3	297.6	354.2	415.7	482.1	550.7	620.9	699.7	784.5	874.1	968.5	1067.8	1171.9	1280.9		
5	6.07	43.0	67.2	96.3	130.2	169.0	213.9	264.1	315.5	375.5	440.7	511.1	584.0	658.9	742.5	832.5	927.5	1027.7	1133.1	1243.6	1359.2		
5.25	6.33	45.0	70.4	100.8	136.4	177.0	224.1	276.6	330.7	393.5	461.9	535.7	612.2	691.0	778.8	873.1	972.8	1077.9	1188.4	1304.3			
5.5	6.65	47.4	74.1	106.2	143.7	186.6	236.2	291.6	348.7	415.0	487.1	564.9	645.8	729.2	821.9	921.5	1026.7	1137.6	1254.2				
5.75	6.96	49.8	77.8	111.6	151.1	196.2	248.4	306.6	367.0	436.7	512.5	594.4	679.7	767.7	865.4	970.2	1081.0	1197.8	1320.6				
6	7.27	52.2	81.5	117.0	158.3	205.7	260.4	321.4	384.9	458.0	537.5	623.4	713.0	805.6	908.2	1018.2	1134.5	1257.0					
6.25	7.53	54.2	84.7	121.5	164.5	213.7	270.5	334.0	400.0	476.1	558.7	648.0	741.2	837.7	944.4	1058.8	1179.7	1307.2					
6.5	7.85	56.6	88.4	126.9	171.8	223.3	282.6	348.9	418.1	497.6	584.0	677.3	774.8	875.9	987.6	1107.2	1233.6						
6.75	8.16	59.0	92.2	132.3	179.1	232.9	294.8	363.9	436.3	519.2	609.4	706.8	808.6	914.4	1031.1	1155.9	1287.9						
7	8.47	61.4	95.9	137.6	186.4	242.4	306.8	378.7	454.2	540.6	634.4	735.8	842.0	952.3	1073.9	1203.9	1341.4						
7.25	8.73	63.4	99.0	142.1	192.5	250.4	316.9	391.3	469.4	558.6	655.6	760.4	870.2	984.4	1110.1	1244.5							
7.5	9.05	65.8	102.7	147.5	199.9	260.0	329.0	406.2	487.5	580.1	680.8	789.6	903.8	1022.6	1153.2	1292.9							
7.75	9.36	68.2	106.5	152.9	207.2	269.6	341.2	421.3	505.7	601.8	706.3	819.1	937.6	1061.2	1196.7	1341.6							
8	9.67	70.5	110.2	158.2	214.5	279.1	353.2	436.1	523.6	623.1	731.3	848.1	970.9	1099.1	1239.5								
8.25	9.93	72.5	113.3	162.8	220.6	287.1	363.4	448.6	538.8	641.2	752.5	872.7	999.1	1131.2	1275.7								
8.5	10.25	74.9	117.1	168.1	227.9	296.7	375.5	463.5	556.8	662.7	777.7	902.0	1032.7	1169.4	1318.9								
8.75	10.56	77.3	120.8	173.5	235.3	306.3	387.6	478.6	575.0	684.3	803.1	931.4	1066.6	1207.9									
9	10.87	79.7	124.5	178.9	242.6	315.8	399.6	493.4	592.9	705.7	828.2	960.5	1099.9	1245.8									
9.25	11.13	81.7	127.7	183.4	248.7	323.8	409.8	505.9	608.1	723.7	849.3	985.0	1128.1	1277.9									
9.5	11.45	84.1	131.4	188.8	256.0	333.3	421.9	520.8	626.2	745.2	874.6	1014.3	1161.7	1316.1									
9.75	11.76	86.5	135.2	194.2	263.4	343.0	434.1	535.9	644.4	766.9	900.0	1043.8	1195.5										
10	12.07	88.9	138.9	199.5	270.7	352.4	446.1	550.7	662.3	788.2	925.0	1072.8	1228.9										

450mm suction line capacity chart

Effective capacity m³

Sheets High	Sheets Round	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Freeboard	0.15m	0.15m	0.18m	0.22m	0.25m	0.25m	0.32m	0.32m	0.32m	0.32m	0.35m	0.39m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m	0.40m
	Tank Diameter	Ø3.1m	Ø3.9m	Ø4.7m	Ø5.5m	Ø6.2m	Ø7.0m	Ø7.8m	Ø8.6m	Ø9.4m	Ø10.1m	Ø10.9m	Ø11.7m	Ø12.5m	Ø13.3m	Ø14.0m	Ø14.8m	Ø15.6m	Ø16.4m	Ø17.2m	Ø17.9m	Ø18.7m
Tank Height																						
1	1.27	6.2	9.7	13.5	17.5	21.7	27.5	34.0	37.0	44.1	51.7	60.0	66.2	69.7	77.4	86.8	96.7	107.2	118.2	129.7	141.8	154.4
1.25	1.53	8.2	12.8	18.0	23.6	29.8	37.7	46.5	52.2	62.1	72.9	84.6	94.4	101.8	113.7	127.4	142.0	157.3	173.5	190.4	208.1	226.6
1.5	1.85	10.6	16.6	23.4	30.9	39.3	49.8	61.4	70.3	83.6	98.2	113.8	128.0	140.0	156.8	175.8	195.9	217.1	239.3	262.6	287.0	312.6
1.75	2.16	13.0	20.3	28.8	38.3	48.9	61.9	76.5	88.5	105.3	123.6	143.3	161.9	178.5	200.3	224.6	250.2	277.2	305.7	335.5	366.6	399.2
2	2.47	15.4	24.0	34.1	45.5	58.4	73.9	91.3	106.4	126.6	148.6	172.4	195.2	216.4	243.1	272.5	303.7	336.5	371.0	407.1	445.0	484.5
2.25	2.73	17.4	27.1	38.6	51.7	66.4	84.1	103.8	121.6	144.7	169.8	196.9	223.4	248.5	279.3	313.2	348.9	386.6	426.2	467.8	511.3	556.7
2.5	3.05	19.8	30.9	44.0	59.0	76.0	96.2	118.7	139.6	166.2	195.0	226.2	257.0	286.8	322.5	361.5	402.8	446.3	492.1	540.1	590.3	642.7
2.75	3.36	22.2	34.6	49.4	66.4	85.6	108.4	133.8	157.8	187.8	220.5	255.7	290.8	325.3	366.0	410.3	457.1	506.5	558.4	612.9	669.9	729.4
3	3.67	24.5	38.3	54.8	73.6	95.1	120.4	148.6	175.8	209.2	245.5	284.7	324.1	363.2	408.8	458.3	510.6	565.7	623.7	684.6	748.2	814.7
3.25	3.93	26.5	41.5	59.3	79.8	103.1	130.5	161.1	190.9	227.2	266.7	309.3	352.4	395.3	445.0	498.9	555.8	615.9	679.0	745.2	814.5	886.9
3.5	4.25	28.9	45.2	64.6	87.1	112.7	142.6	176.1	209.0	248.7	291.9	338.5	385.9	433.5	488.1	547.2	609.7	675.6	744.9	817.5	893.5	972.9
3.75	4.56	31.3	49.0	70.1	94.5	122.3	154.8	191.1	227.2	270.4	317.3	368.0	419.8	472.0	531.6	596.0	664.1	735.8	811.2	890.3	973.1	1059.5
4	4.87	33.7	52.7	75.4	101.7	131.8	166.8	205.9	245.1	291.7	342.4	397.1	453.1	509.9	574.4	644.0	717.5	795.0	876.5	962.0	1051.4	1144.8
4.25	5.13	35.7	55.8	79.9	107.9	139.8	177.0	218.5	260.3	309.8	363.5	421.6	481.3	542.0	610.6	684.6	762.8	845.2	931.8	1022.7	1117.7	1217.1
4.5	5.45	38.1	59.5	85.3	115.2	149.4	189.0	233.4	278.4	331.3	388.8	450.9	514.9	580.2	653.8	733.0	816.7	904.9	997.6	1094.9	1196.7	1303.0
4.75	5.76	40.5	63.3	90.7	122.6	159.0	201.2	248.4	296.6	352.9	414.2	480.4	548.8	618.7	697.3	781.7	871.0	965.1	1064.0	1167.7	1276.3	
5	6.07	42.9	67.0	96.0	129.8	168.5	213.2	263.2	314.5	374.3	439.2	509.4	582.1	656.7	740.1	829.7	924.4	1024.3	1129.3	1239.4	1354.6	
5.25	6.33	44.9	70.1	100.5	136.0	176.5	223.4	275.8	329.6	392.3	460.4	534.0	610.3	688.8	776.3	870.3	969.7	1074.5	1184.6	1300.1		
5.5	6.65	47.3	73.9	105.9	143.3	186.1	235.5	290.7	347.7	413.8	485.6	563.2	643.9	727.0	819.4	918.7	1023.6	1134.2	1250.4			
5.75	6.96	49.7	77.6	111.3	150.6	195.7	247.7	305.8	365.9	435.5	511.1	592.7	677.7	765.5	862.9	967.4	1077.9	1194.4	1316.8			
6	7.27	52.1	81.3	116.7	157.9	205.2	259.7	320.6	383.8	456.8	536.1	621.7	711.1	803.4	905.7	1015.4	1131.4	1253.6				
6.25	7.53	54.1	84.5	121.2	164.0	213.2	269.8	333.1	399.0	474.8	557.3	646.3	739.3	835.5	941.9	1056.0	1176.6	1303.7				
6.5	7.85	56.4	88.2	126.5	171.4	222.7	281.9	348.0	417.1	496.3	582.5	675.6	772.8	873.7	985.1	1104.4	1230.5					
6.75	8.16	58.9	92.0	132.0	178.7	232.4	294.1	363.1	435.3	518.0	607.9	705.1	806.7	912.2	1028.6	1153.1	1284.8					
7	8.47	61.2	95.7	137.3	186.0	241.8	306.1	377.9	453.2	539.3	633.0	734.1	840.0	950.1	1071.4	1201.1	1338.3					
7.25	8.73	63.2	98.8	141.8	192.1	249.9	316.2	390.4	468.4	557.4	654.2	758.7	868.2	982.2	1107.6	1241.7						
7.5	9.05	65.6	102.5	147.2	199.4	259.4	328.3	405.3	486.4	578.9	679.4	787.9	901.8	1020.4	1150.7	1290.1						
7.75	9.36	68.0	106.3	152.6	206.8	269.1	340.5	420.4	504.6	600.5	704.8	817.4	935.7	1059.0	1194.2	1338.9						
8	9.67	70.4	110.0	157.9	214.1	278.5	352.5	435.2	522.5	621.9	729.8	846.4	969.0	1096.9	1237.0							
8.25	9.93	72.4	113.1	162.4	220.2	286.6	362.7	447.7	537.7	639.9	751.0	871.0	997.2	1129.0	1273.3							
8.5	10.25	74.8	116.9	167.8	227.5	296.1	374.8	462.7	555.8	661.4	776.3	900.3	1030.8	1167.2	1316.4							
8.75	10.56	77.2	120.6	173.2	234.9	305.7	386.9	477.7	574.0	683.1	801.7	929.8	1064.6	1205.7								
9	10.87	79.6	124.3	178.6	242.2	315.2	398.9	492.5	591.9	704.4	826.7	958.8	1098.0	1243.6								
9.25	11.13	81.6	127.5	183.1	248.3	323.2	409.1	505.1	607.1	722.5	847.9	983.4	1126.2	1275.7								
9.5	11.45	84.0	131.2	188.4	255.6	332.8	421.2	520.0	625.1	744.0	873.1	1012.6	1159.8	1313.9								
9.75	11.76	86.4	135.0	193.9	263.0	342.4	433.4	535.0	643.3	765.6	898.6	1042.1	1193.6									
10	12.07	88.7	138.7	199.2	270.2	351.9	445.4	549.8	661.3	787.0	923.6	1071.1	1226.9									

