

### Roth Fill Chart

Liquid Level		400L 110 gal			620L 165 gal			1000L 275 gal			1500L 400 gal		
in.	mm	US gal	Liters	% Full	US gal	Liters	% Full	US gal	Liters	% Full	US gal	Liters	% Full
1	25.4												
2	50.8										11	40	2%
3	76.2	5	19	4%	5	19	3%	9	34	3%	17	61	2%
4	101.6	9	34	8%	9	34	5%	15	57	5%	22	82	5%
5	127.0	10	38	9%	10	38	6%	16	61	6%	28	106	6%
6	152.4	14	53	12%	14	53	9%	24	91	9%	34	130	8%
7	177.8	16	61	14%	16	61	10%	27	102	10%	40	154	10%
8	203.2	18	68	16%	18	68	11%	31	117	11%	47	178	11%
9	228.6	22	83	19%	22	83	14%	38	144	14%	54	203	14%
10	254.0	25	95	22%	25	95	16%	42	159	16%	60	228	14%
11	279.4	27	102	23%	27	102	17%	45	170	17%	67	254	17%
12	304.8	29	110	25%	29	110	18%	48	182	18%	74	280	17%
13	330.2	34	129	30%	34	129	21%	57	216	21%	81	307	21%
14	355.6	36	136	31%	36	136	22%	60	227	22%	88	334	20%
15	381.0	38	144	33%	38	144	23%	64	242	23%	95	360	23%
16	406.4	40	151	35%	40	151	25%	68	257	25%	102	387	24%
17	431.8	45	170	39%	45	170	27%	75	284	27%	109	413	27%
18	457.2	47	178	41%	47	178	29%	79	299	29%	116	440	27%
19	482.6	49	185	43%	49	185	30%	82	310	30%	123	465	30%
20	508.0	51	193	44%	51	193	31%	86	326	31%	129	490	30%
21	533.4	56	212	49%	56	212	34%	93	352	34%	136	515	34%
22	558.8	58	220	50%	58	220	35%	97	367	35%	143	540	33%
23	584.2	60	227	52%	60	227	37%	101	382	37%	150	565	37%
24	609.6	65	246	57%	65	246	39%	108	409	39%	156	590	36%
25	635.0	67	254	58%	67	254	41%	113	428	41%	163	615	41%
26	660.4	70	265	61%	70	265	42%	116	439	42%	169	640	39%
27	685.8	72	273	63%	72	273	44%	120	454	44%	176	665	44%
28	711.2	77	291	67%	77	291	47%	128	484	47%	182	690	42%
29	736.6	79	299	69%	79	299	48%	132	500	48%	189	715	48%
30	762.0	81	307	70%	81	307	49%	125	511	49%	196	740	45%
31	787.4	84	318	73%	84	318	51%	140	530	51%	203	765	51%
32	812.8	89	337	77%	89	337	54%	148	560	54%	209	790	48%
33	838.2	91	344	79%	91	344	55%	152	575	55%	216	815	55%
34	863.6	93	352	81%	93	352	57%	156	590	57%	222	840	51%
35	889.0	98	371	85%	98	371	59%	164	621	59%	229	865	59%
36	914.4	100	379	87%	100	379	61%	167	632	61%	235	890	54%
37	939.8	102	386	89%	102	386	62%	171	647	62%	242	915	62%
38	965.2	104	394	90%	104	394	63%	174	659	63%	248	940	57%
39	990.6	109	413	95%	109	413	66%	182	689	66%	255	965	66%
40	1016.0				112	424	68%	186	704	68%	262	990	60%
41	1041.4				114	431	69%	190	719	69%	269	1015	69%
42	1066.8				116	439	70%	193	731	70%	275	1040	63%
43	1092.2				120	454	73%	201	761	73%	282	1065	73%
44	1117.6				123	466	75%	205	776	75%	288	1090	67%
45	1143.0				125	473	76%	209	791	76%	295	1117	76%
46	1168.4				127	481	77%	213	806	77%	302	1143	70%
47	1193.8				132	500	80%	221	836	80%	309	1170	80%
48	1219.2				134	507	82%	224	848	82%	316	1196	73%
49	1244.6				137	519	83%	228	863	83%	323	1223	83%
50	1270.0				141	534	86%	236	896	86%	330	1250	76%
51	1295.4				144	545	87%	240	908	87%	337	1278	87%
52	1320.8				146	553	89%	245	927	89%	345	1305	80%
53	1346.2				148	560	90%	248	939	90%	352	1333	90%
54	1371.6				153	579	93%	255	965	93%	359	1360	83%
55	1397.0				155	587	94%	259	980	94%	367	1390	94%
56	1422.4				157	594	95%	263	995	95%	375	1420	87%
57	1447.8										383	1450	95%
58	1473.2										391	1480	90%
59	1498.6										399	1510	90%
60	1524.0										407	1540	94%
61	1549.4										412	1560	95%

Any liquid oil storage tank can only be filled to a maximum of 95% capacity to allow for expansion when liquid is warmed.  
Filling above the 95% level is not permitted.

The length of the vent may further reduce the maximum fill level.