

Quick Reference Tables - Cylindrical Tank

Volume in Gallons

Diameter (inches) ft	Tank Length in Feet									
	1	2	3	4	5	6	7	8	9	10
(24) 2.0	24	47	71	94	118	141	165	188	212	235
(26) 2.17	28	55	83	111	138	166	194	221	249	277
(28) 2.33	32	64	96	128	159	191	223	255	287	319
(30) 2.5	37	73	110	147	184	220	257	294	330	367
(32) 2.67	42	84	126	168	209	251	293	335	377	419
(34) 2.83	47	94	141	188	235	282	329	376	423	471
(36) 3.0	53	106	159	212	264	317	370	423	476	529
(38) 3.17	59	118	177	236	295	354	413	472	531	590
(40) 3.33	65	130	195	261	326	391	456	521	586	651
(42) 3.5	72	144	216	288	360	432	504	576	648	720
(48) 4.0	94	188	282	376	470	564	658	752	846	940
(54) 4.5	119	238	357	476	595	714	833	952	1071	1190
(60) 5.0	147	294	441	588	734	881	1028	1175	1322	1469

Volume in Cubic Feet

Diameter (inches) ft	Tank Length in Feet									
	1	2	3	4	5	6	7	8	9	10
(24) 2.0	3.2	6.3	9.5	12.6	15.8	18.9	22.0	25.1	28.3	31.4
(26) 2.17	3.7	7.4	11.1	14.8	18.4	22.2	25.9	29.5	33.3	37.0
(28) 2.33	4.3	8.6	12.8	17.1	21.3	25.5	29.8	34.1	38.4	42.6
(30) 2.5	4.9	9.8	14.7	19.7	24.6	29.4	34.4	39.3	44.1	49.1
(32) 2.67	5.6	11.2	16.8	22.5	27.9	33.6	39.2	44.8	50.4	56.0
(34) 2.83	6.3	12.6	18.9	25.1	31.4	37.7	44.0	50.3	56.6	63.0
(36) 3.0	7.0	14.2	21.3	28.3	35.3	42.4	49.5	56.6	63.6	70.7
(38) 3.17	7.9	15.8	23.7	31.6	39.4	47.3	55.2	63.1	71.0	78.9
(40) 3.33	8.7	17.4	26.1	34.9	43.6	52.3	61.0	69.7	78.3	87.0
(42) 3.5	9.6	19.3	28.9	38.5	48.1	58.8	67.4	77.0	86.6	96.3
(48) 4.0	12.6	25.1	37.7	50.3	62.8	75.4	88.0	100.5	113.1	125.7
(54) 4.5	15.9	31.8	47.7	63.6	79.5	95.5	111.4	127.3	143.2	159.1
(60) 5.0	19.7	39.3	59.0	78.6	98.1	117.8	137.4	157.1	176.7	196.4

Volume Formula of a "Flat" Head Cylinder: $V = .7854 \times (D/12)^2 \times L$
 (V = cu ft, D = inches, L = feet)



To convert cubic feet to gallons: multiply (cu. ft.) x 7.48

To convert gallons to cubic feet: multiply (gal.) x .1337

Note 1: Due to different head designs, the above tables provide only an estimated volume. Upon disagreements with volumes taken from this table, owner should be allowed to provide more exact calculations for the specific tank.

Note 2: Volumes **bolded** in both Tables indicate air tank sizes 12 cubic foot volume and above which require inspection, registration and a valid permit to operate per Boiler Code sections SPS 341.17 and 341.24.