

Respiratory Minute Volume (RMV) Chart

SAC in	16	30	40	*72	80	80	80	95	d190	100	d200	119	d238	tank cu. Ft.
	3000	3000	3000	2250	2400	3000	3500	2400	2400	3500	3500	3500	3500	working psi
PSI	All calculations are at surface and are in cubic feet per minute (cfm)													
2	0.01	0.02	0.03	0.06	0.07	0.05	0.04	0.08	0.16	0.06	0.11	0.07	0.13	
3	0.02	0.03	0.04	0.09	0.10	0.08	0.07	0.12	0.24	0.08	0.17	0.10	0.20	
4	0.02	0.04	0.05	0.11	0.13	0.11	0.09	0.16	0.32	0.11	0.23	0.13	0.27	
5	0.03	0.05	0.06	0.14	0.17	0.13	0.11	0.20	0.40	0.14	0.28	0.17	0.34	
6	0.03	0.06	0.08	0.17	0.20	0.16	0.14	0.24	0.47	0.17	0.34	0.20	0.41	
7	0.04	0.07	0.09	0.20	0.23	0.19	0.16	0.28	0.56	0.20	0.40	0.24	0.48	
8	0.04	0.08	0.11	0.23	0.27	0.21	0.18	0.32	0.63	0.23	0.46	0.27	0.54	
9	0.05	0.09	0.12	0.26	0.30	0.24	0.20	0.36	0.72	0.26	0.51	0.30	0.61	
10	0.05	0.10	0.13	0.29	0.33	0.27	0.23	0.39	0.79	0.28	0.57	0.34	0.68	
11	0.06	0.11	0.15	0.32	0.37	0.29	0.25	0.43	0.86	0.31	0.63	0.37	0.75	
12	0.06	0.12	0.16	0.35	0.40	0.32	0.27	0.47	0.95	0.34	0.68	0.41	0.81	
13	0.07	0.13	0.17	0.37	0.43	0.35	0.30	0.51	1.02	0.37	0.74	0.44	0.88	
14	0.07	0.14	0.19	0.40	0.47	0.37	0.32	0.55	1.10	0.40	0.80	0.48	0.95	
15	0.08	0.15	0.20	0.43	0.50	0.40	0.34	0.59	1.18	0.43	0.86	0.51	1.02	
16	0.08	0.16	0.21	0.46	0.53	0.43	0.36	0.63	1.27	0.46	0.91	0.54	1.09	
17	0.09	0.17	0.23	0.49	0.57	0.45	0.39	0.67	1.34	0.48	0.97	0.58	1.15	
18	0.09	0.18	0.24	0.52	0.60	0.48	0.41	0.71	1.42	0.51	1.03	0.61	1.22	
19	0.10	0.19	0.25	0.55	0.63	0.51	0.43	0.75	1.50	0.54	1.08	0.64	1.29	
20	0.11	0.20	0.27	0.58	0.67	0.53	0.46	0.79	1.58	0.57	1.14	0.68	1.36	
21	0.11	0.21	0.28	0.61	0.70	0.56	0.48	0.83	1.66	0.60	1.20	0.71	1.43	
22	0.12	0.22	0.29	0.63	0.73	0.59	0.50	0.87	1.74	0.63	1.26	0.75	1.49	
23	0.12	0.23	0.31	0.66	0.77	0.61	0.52	0.91	1.82	0.66	1.31	0.78	1.56	
24	0.13	0.24	0.32	0.69	0.80	0.64	0.55	0.95	1.90	0.68	1.37	0.81	1.63	
25	0.13	0.25	0.33	0.72	0.83	0.67	0.57	0.99	1.98	0.71	1.43	0.85	1.70	
26	0.14	0.26	0.35	0.75	0.87	0.69	0.59	1.03	2.06	0.74	1.48	0.88	1.77	
27	0.14	0.27	0.36	0.78	0.90	0.72	0.62	1.07	2.14	0.77	1.54	0.92	1.83	
28	0.15	0.28	0.37	0.81	0.93	0.75	0.64	1.11	2.22	0.80	1.60	0.95	1.90	
29	0.15	0.29	0.39	0.84	0.97	0.77	0.66	1.15	2.30	0.83	1.66	0.98	1.97	
30	0.16	0.30	0.40	0.87	1.00	0.80	0.68	1.19	2.37	0.86	1.71	1.02	2.04	
31	0.16	0.31	0.41	0.89	1.03	0.83	0.71	1.23	2.45	0.88	1.77	1.05	2.11	
32	0.17	0.32	0.43	0.92	1.07	0.85	0.73	1.27	2.53	0.91	1.83	1.09	2.17	
33	0.17	0.33	0.44	0.95	1.10	0.88	0.75	1.31	2.61	0.94	1.88	1.12	2.24	
34	0.18	0.34	0.45	0.98	1.13	0.91	0.78	1.34	2.69	0.97	1.94	1.15	2.31	
35	0.18	0.35	0.47	1.01	1.17	0.93	0.80	1.38	2.77	1.00	2.00	1.19	2.38	

Directions:

To determine your RMV in cfm, based on your SAC rate and a specific size tank. Follow the SAC/psi column down to your SAC rate. Then slide over to the right until you intersect with the tank you used. This new number is you RMV. To find your SAC/psi using a different tank, start at the column for the tank you are going to use. Follow the column down until you find your RMV or close to it, then slide over to the SAC/psi column. This will be your new SAC/psi for the different tank you are going to use.

*Calculation based on 65 cu. Ft. d-double tanks

Formulas:
$$\frac{\text{SAC in psi}}{\text{tank working pressure}} \times \text{tank cubic feet} = \text{Respiratory Minute Volume (SAC converted to cfm)}$$

$$\frac{\text{RMV}}{\text{tank cu. Ft.}} \times \text{tank working pressure} = \text{Sac in Psi (RMV converted to SAC in psi)}$$