HARGRAVES Advanced Fluidic Solutions

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Standard Atmosphere Table

Altitude Above Sea Level		Atmospheric Pressure		Maximum Vacuum Level Attainable			Temperature		Density		Pressure and Vacuum Level	
feet	meters	psia	mbar	in Hg	in H2O	mm Hg	° F	° C	lb/ft3	kg/m3	loss	max
0	0	14.70	1013.5	29.92	406.1	760.0	59.0	15.0	0.0765	1.2256	-	100.0%
1,000	305	14.16	976.3	28.9	392.2	734.1	55.4	13.0	0.0743	1.1900	3.6%	96.4%
2,000	610	13.66	941.8	27.8	377.3	706.1	51.9	11.1	0.0721	1.1555	7.0%	93.0%
3,000	914	13.16	907.3	26.8	363.7	680.7	48.3	9.1	0.0700	1.1215	10.4%	89.6%
4,000	1,219	12.68	874.2	25.8	350.1	655.3	44.7	7.1	0.0680	1.0885	13.6%	86.4%
5,000	1,524	12.22	842.5	24.9	337.9	632.5	41.2	5.1	0.0659	1.0560	16.8%	83.2%
6,000	1,829	11.77	811.5	24.0	325.7	609.6	37.6	3.1	0.0640	1.0246	19.9%	80.1%
7,000	2,134	11.33	781.2	23.1	313.5	586.7	34.0	1.1	0.0620	0.9936	22.8%	77.2%
8,000	2,438	10.91	752.2	22.2	301.3	563.9	30.5	-0.8	0.0601	0.9632	25.7%	74.3%
9,000	2,743	10.50	723.9	21.4	290.4	543.6	26.9	-2.8	0.0583	0.9339	28.5%	71.5%
10,000	3,048	10.10	696.4	20.6	279.6	523.2	23.3	-4.8	0.0565	0.9050	31.2%	68.8%
11,000	3,353	9.71	669.5	19.8	268.7	502.9	19.8	-6.8	0.0547	0.8767	33.9%	66.1%
12,000	3,658	9.34	644.0	19.0	257.8	482.6	16.2	-8.8	0.0530	0.8493	36.4%	63.6%
13,000	3,962	8.97	618.5	18.3	248.3	464.8	12.6	-10.8	0.0513	0.8225	38.9%	61.1%
14,000	4,267	8.62	594.3	17.5	237.5	444.5	9.1	-12.7	0.0497	0.7963	41.3%	58.8%
15,000	4,752	8.28	570.9	16.9	229.3	429.3	5.5	-14.7	0.0481	0.7710	43.6%	56.4%
16,000	4,877	7.94	547.4	16.22	220.1	412.0	1.9	-16.7	0.0466	0.7464	45.8%	54.2%
17,000	5,182	7.63	526.1	15.57	211.3	395.5	-1.7	-18.7	0.0451	0.7221	48.0%	52.0%
18,000	5,486	7.32	504.7	14.94	202.8	379.5	-5.3	-20.7	0.0436	0.6985	50.1%	49.9%
19,000	5,791	7.02	484.0	14.34	194.6	364.2	-8.7	-22.6	0.0421	0.6754	52.1%	47.9%
20,000	6,096	6.73	464.0	13.75	186.6	349.3	-12.3	-24.6	0.0407	0.6530	54.1%	46.0%
21,000	6,401	6.46	445.4	13.18	178.9	334.8	-15.9	-26.6	0.0394	0.6312	55.9%	44.1%
22,000	6,706	6.19	426.8	12.64	171.5	321.1	-19.5	-28.6	0.0381	0.6099	57.8%	42.2%
23,000	7,010	5.93	408.9	12.11	164.3	307.6	-23.1	-30.6	0.0368	0.5890	59.5%	40.5%
24,000	7,315	5.68	391.6	11.60	157.4	294.6	-26.5	-32.5	0.0355	0.5689	61.2%	38.8%
25,000	7,620	5.44	375.1	11.10	150.6	281.9	-30.1	-34.5	0.0343	0.5492	62.9%	37.1%

The Standard Atmosphere is an idealized representation of the expected average pressure, temperature, and air density for various altitudes. It is based on mathematical formulas that reduce temperature and pressure by a certain amount as altitude is increased. This information is for reference only.