

Saturated Steam Pressure and Temperature

VAPOR PRESSURE		TEMPERATURE DEGREES F	STEAM DENSITY LBS/CU.FT.	WATER SPECIFIC GRAVITY
Absolute, Psia	Vacuum, In. Hg.			
0.20	29.51	53.14	.000655	1.00
0.25	29.41	59.30	.000810	1.00
0.30	29.31	64.47	.000962	1.00
0.35	29.21	68.93	.00111	1.00
0.40	29.11	72.86	.00126	1.00
0.45	29.00	76.38	.00141	1.00
0.50	28.90	79.58	.00156	1.00
0.60	28.70	85.21	.00185	1.00
0.70	28.49	90.08	.00214	1.00
0.80	28.29	94.38	.00243	1.00
0.90	28.09	98.24	.00271	.99
1.0	27.88	101.74	.00300	.99
1.2	27.48	107.92	.00356	.99
1.4	27.07	113.26	.00412	.99
1.6	26.66	117.99	.00467	.99
1.8	26.26	122.23	.00521	.99
2.0	25.85	126.08	.00576	.99
2.2	25.44	129.62	.00630	.99
2.4	25.03	132.89	.00683	.99
2.6	24.63	135.94	.00737	.99
2.8	24.22	138.79	.00790	.98
3.0	23.81	141.48	.00842	.98
3.5	22.79	147.57	.00974	.98
4.0	21.78	152.97	.0110	.98
4.5	20.76	157.83	.0123	.98
5.0	19.74	162.24	.0136	.98
5.5	18.72	166.30	.0149	.98
6.0	17.70	170.06	.0161	.98
6.5	16.69	173.56	.0174	.97
7.0	15.67	176.85	.0186	.97
7.5	14.65	179.94	.0199	.97
8.0	13.63	182.86	.0211	.97
8.5	12.61	185.64	.0224	.97
9.0	11.60	188.28	.0236	.97
9.5	10.58	190.80	.0248	.97
10.0	9.56	193.21	.0260	.97
11.0	7.52	197.75	.0285	.97
12.0	5.49	201.96	.0309	.96
13.0	3.45	205.88	.0333	.96
14.0	1.42	209.56	.0357	.96

VAPOR PRESSURE		TEMPERATURE DEGREES F	STEAM DENSITY LBS/CU.FT.	WATER SPECIFIC GRAVITY
Absolute, Psia	Gauge, Psig			
14.696	0.0	212.00	.0373	.96
15.0	0.3	213.03	.0380	.96
16.0	1.3	216.32	.0404	.96
17.0	2.3	219.44	.0428	.96
18.0	3.3	222.41	.0451	.96
19.0	4.3	225.24	.0474	.95
20.0	5.3	227.96	.0498	.95
21.0	6.3	230.57	.0521	.95
22.0	7.3	233.07	.0544	.95
23.0	8.3	235.49	.0567	.95
24.0	9.3	237.82	.0590	.95
25.0	10.3	240.07	.0613	.95
26.0	11.3	242.25	.0636	.95
27.0	12.3	244.36	.0659	.95
28.0	13.3	246.41	.0682	.94
29.0	14.3	248.40	.0705	.94
30.0	15.3	250.33	.0727	.94
31.0	16.3	252.22	.0750	.94
32.0	17.3	254.05	.0773	.94
33.0	18.3	255.84	.0795	.94
34.0	19.3	257.38	.0818	.94
35.0	20.3	259.28	.0840	.94
36.0	21.3	260.95	.0863	.94
37.0	22.3	262.57	.0885	.94
38.0	23.3	264.16	.0908	.94
39.0	24.3	265.72	.0930	.94

VAPOR PRESSURE		TEMPERATURE DEGREES F	STEAM DENSITY LBS/CU.FT.	WATER SPECIFIC GRAVITY
Absolute, Psia	Gauge, Psig			
40.0	25.3	267.25	.0953	.94
41.0	26.3	268.74	.0975	.93
42.0	27.3	270.21	.0997	.93
43.0	28.3	271.64	.102	.93
44.0	29.3	273.05	.104	.93
45.0	30.3	274.44	.106	.93
46.0	31.3	275.80	.109	.93
47.0	32.3	277.13	.111	.93
48.0	33.3	278.45	.113	.93
49.0	34.3	279.74	.115	.93
50.0	35.3	281.01	.117	.93
51.0	36.3	282.26	.120	.93
52.0	37.3	283.49	.122	.93
53.0	38.3	284.70	.124	.93
54.0	39.3	285.90	.126	.93
55.0	40.3	287.07	.128	.93
56.0	41.3	288.23	.131	.93
57.0	42.3	289.37	.133	.93
58.0	43.3	290.50	.135	.92
59.0	44.3	291.61	.137	.92
60.0	45.3	292.71	.139	.92
61.0	46.3	293.79	.142	.92
62.0	47.3	294.85	.144	.92
63.0	48.3	295.90	.146	.92
64.0	49.3	296.94	.148	.92
65.0	50.3	297.97	.150	.92
66.0	51.3	298.99	.152	.92
67.0	52.3	299.99	.155	.92
68.0	53.3	300.98	.157	.92
69.0	54.3	301.96	.159	.92
70.0	55.3	302.92	.161	.92
71.0	56.3	303.88	.163	.92
72.0	57.3	304.83	.165	.92
73.0	58.3	305.76	.168	.92
74.0	59.3	306.68	.170	.92
75.0	60.3	307.60	.172	.92
76.0	61.3	308.50	.174	.91
77.0	62.3	309.40	.176	.91
78.0	63.3	310.29	.178	.91
79.0	64.3	311.16	.181	.91
80.0	65.3	312.03	.183	.91
81.0	66.3	312.89	.185	.91
82.0	67.3	313.74	.187	.91
83.0	68.3	314.59	.189	.91
84.0	69.3	315.42	.191	.91
85.0	70.3	316.25	.193	.91
86.0	71.3	317.07	.196	.91
87.0	72.3	317.88	.198	.91
88.0	73.3	318.68	.200	.91
89.0	74.3	319.48	.202	.91
90.0	75.3	320.27	.204	.91
91.0	76.3	321.06	.206	.91
92.0	77.3	321.83	.209	.91
93.0	78.3	322.60	.211	.91
94.0	79.3	323.36	.213	.91
95.0	80.3	324.12	.215	.91
96.0	81.3	324.87	.217	.91
97.0	82.3	325.61	.219	.91
98.0	83.3	326.35	.221	.91
99.0	84.3	327.08	.224	.90
100.0	85.3	327.81	.226	.90
101.0	86.3	328.53	.228	.90
102.0	87.3	329.25	.230	.90
103.0	88.3	329.96	.232	.90
104.0	89.3	330.66	.234	.90
105.0	90.3	331.36	.236	.90
106.0	91.3	332.05	.238	.90
107.0	92.3	332.74	.241	.90
108.0	93.3	333.42	.243	.90
109.0	94.3	334.10	.245	.90

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Saturated Steam Pressure and Temperature (continued)

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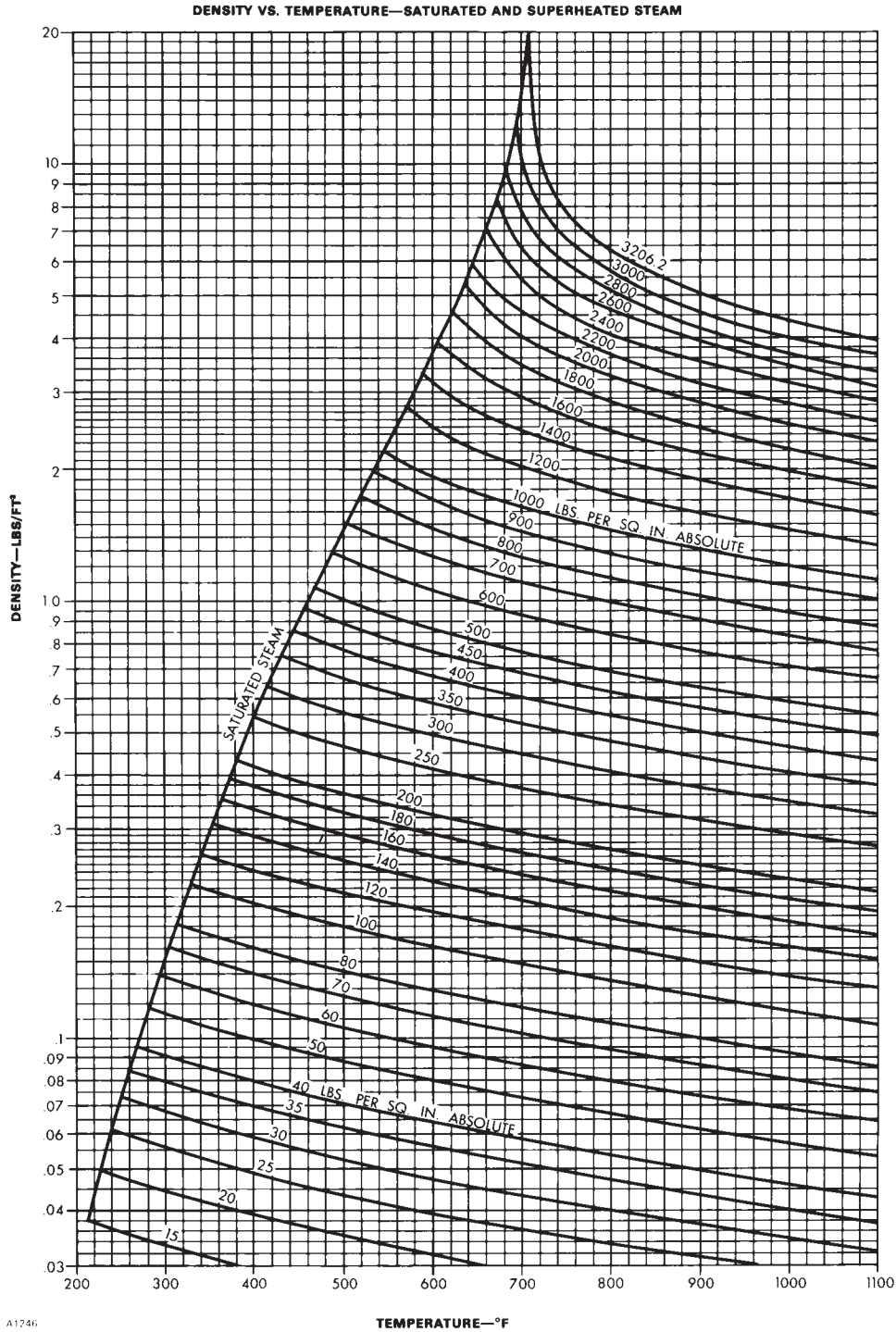
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VAPOR PRESSURE		TEMPERATURE DEGREES F	STEAM DENSITY LBS/CU.FT.	WATER SPECIFIC GRAVITY
Absolute, Psia	Gauge, Psig			
110.0	95.3	334.77	.247	.90
111.0	96.3	335.44	.249	.90
112.0	97.3	336.11	.251	.90
113.0	98.3	336.77	.253	.90
114.0	99.3	337.42	.255	.90
115.0	100.3	338.07	.258	.90
116.0	101.3	338.72	.260	.90
117.0	102.3	339.36	.262	.90
118.0	103.3	339.99	.264	.90
119.0	104.3	340.62	.266	.90
120.0	105.3	341.25	.268	.90
121.0	106.3	341.88	.270	.90
122.0	107.3	342.50	.272	.90
123.0	108.3	343.11	.275	.90
124.0	109.3	343.72	.277	.90
125.0	110.3	344.33	.279	.90
126.0	111.3	344.94	.281	.89
127.0	112.3	345.54	.283	.89
128.0	113.3	346.13	.285	.89
129.0	114.3	346.73	.287	.89
130.0	115.3	347.32	.289	.89
131.0	116.3	347.90	.292	.89
132.0	117.3	348.48	.294	.89
133.0	118.3	349.06	.296	.89
134.0	119.3	349.64	.298	.89
135.0	120.3	350.21	.300	.89
136.0	121.3	350.78	.302	.89
137.0	122.3	351.35	.304	.89
138.0	123.3	351.91	.306	.89
139.0	124.3	352.47	.308	.89
140.0	125.3	353.02	.311	.89
141.0	126.3	353.57	.313	.89
142.0	127.3	354.12	.315	.89
143.0	128.3	354.67	.317	.89
144.0	129.3	355.21	.319	.89
145.0	130.3	355.76	.321	.89
146.0	131.3	356.29	.323	.89
147.0	132.3	356.83	.325	.89
148.0	133.3	357.36	.327	.89
149.0	134.3	357.89	.330	.89
150.0	135.3	358.42	.332	.89
152.0	137.3	359.46	.336	.89
154.0	139.3	360.49	.340	.89
156.0	141.3	361.52	.344	.88
158.0	143.3	362.53	.349	.88
160.0	145.3	363.53	.353	.88
162.0	147.3	364.53	.357	.88
164.0	149.3	365.51	.361	.88
166.0	151.3	366.48	.365	.88
168.0	153.3	367.45	.370	.88
170.0	155.3	368.41	.374	.88
172.0	157.3	369.35	.378	.88
174.0	159.3	370.29	.382	.88
176.0	161.3	371.22	.387	.88
178.0	163.3	372.14	.391	.88
180.0	165.3	373.06	.395	.88
182.0	167.3	373.96	.399	.88
184.0	169.3	374.86	.403	.88
186.0	171.3	375.75	.407	.88
188.0	173.3	376.64	.412	.88
190.0	175.3	377.51	.416	.88
192.0	177.3	378.38	.420	.87
194.0	179.3	379.24	.424	.87
196.0	181.3	380.10	.429	.87
198.0	183.3	380.95	.433	.87
200.0	185.3	381.79	.437	.87
205.0	190.3	383.86	.448	.87
210.0	195.3	385.90	.458	.87
215.0	200.3	387.89	.469	.87
220.0	205.3	389.86	.479	.87
225.0	210.3	391.79	.490	.87
230.0	215.3	393.68	.500	.87
235.0	220.3	395.54	.511	.86
240.0	225.3	397.37	.522	.86
245.0	230.3	399.18	.532	.86

VAPOR PRESSURE		TEMPERATURE DEGREES F	STEAM DENSITY LBS/CU.FT.	WATER SPECIFIC GRAVITY
Absolute, Psia	Gauge, Psig			
250.0	235.3	400.95	.542	.86
255.0	240.3	402.70	.553	.86
260.0	245.3	404.42	.563	.86
265.0	250.3	406.11	.574	.86
270.0	255.3	407.78	.585	.86
275.0	260.3	409.43	.595	.85
280.0	265.3	411.05	.606	.85
285.0	270.3	412.65	.616	.85
290.0	275.3	414.23	.627	.85
295.0	280.3	415.79	.637	.85
300.0	285.3	417.33	.648	.85
320.0	305.3	423.29	.690	.85
340.0	325.3	428.97	.733	.84
360.0	345.3	434.40	.775	.84
380.0	365.3	439.60	.818	.83
400.0	385.3	444.59	.861	.83
420.0	405.3	449.39	.904	.83
440.0	425.3	454.02	.947	.82
460.0	445.3	458.50	.991	.82
480.0	465.3	462.82	1.03	.81
500.0	485.3	467.01	1.08	.81
520.0	505.3	471.07	1.12	.81
540.0	525.3	475.01	1.17	.81
560.0	545.3	478.85	1.21	.80
580.0	565.3	482.58	1.25	.80
600.0	585.3	486.21	1.30	.80
620.0	605.3	489.75	1.34	.79
640.0	625.3	493.21	1.39	.79
660.0	645.3	496.58	1.43	.79
680.0	665.3	499.88	1.48	.79
700.0	685.3	503.10	1.53	.78
720.0	705.3	506.25	1.57	.78
740.0	725.3	509.34	1.62	.77
760.0	745.3	512.36	1.66	.77
780.0	765.3	515.33	1.71	.77
800.0	785.3	518.23	1.76	.77
820.0	805.3	521.08	1.81	.77
840.0	825.3	523.88	1.85	.76
860.0	845.3	526.63	1.90	.76
880.0	865.3	529.33	1.95	.76
900.0	885.3	531.98	2.00	.76
920.0	905.3	534.59	2.05	.75
940.0	925.3	537.16	2.10	.75
960.0	945.3	539.68	2.14	.75
980.0	965.3	542.17	2.19	.75
1000.0	985.3	544.61	2.24	.74
1050.0	1035.3	550.57	2.37	.74
1100.0	1085.3	556.31	2.50	.73
1150.0	1135.3	561.86	2.63	.73
1200.0	1185.3	567.22	2.76	.72
1250.0	1235.3	572.42	2.90	.71
1300.0	1285.3	577.46	3.04	.71
1350.0	1335.3	582.35	3.18	.70
1400.0	1385.3	587.10	3.32	.69
1450.0	1435.3	591.73	3.47	.69
1500.0	1485.3	596.23	3.62	.68
1600.0	1585.3	604.90	3.92	.67
1700.0	1685.3	613.15	4.25	.66
1800.0	1785.3	621.03	4.59	.65
1900.0	1885.3	628.58	4.95	.64
2000.0	1985.3	635.82	5.32	.62
2100.0	2085.3	642.77	5.73	.61
2200.0	2185.3	649.46	6.15	.60
2300.0	2285.3	655.91	6.61	.59
2400.0	2385.3	662.12	7.11	.57
2500.0	2485.3	668.13	7.65	.56
2600.0	2585.3	673.94	8.24	.54
2700.0	2685.3	679.55	8.90	.53
2800.0	2785.3	684.99	9.66	.51
2900.0	2885.3	690.26	10.6	.49
3000.0	2985.3	695.36	11.7	.46
3100.0	3085.3	700.31	13.3	.43
3200.0	3185.3	705.11	17.2	.36
3206.2	3191.5	705.40	19.9	.32



Saturated and Superheated Steam Density/Temperature Curve



The degree of superheat is the difference between the actual temperature and the saturation steam temperature.

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