

PROPERTIES OF WATER AND SATURATED STEAM

Vacuum in. Hg	TEMP. °F	CU. FT. PER LB.		HEAT IN BTU PER POUND		
		LIQUID	STEAM	LIQUID	LATENT	STEAM
29.75	40	.01602	2423.7	8	1071	1079
29	79	.01608	652.3	47	1049	1096
25	134	.01626	143.2	102	1018	1119
20	161	.01640	74.8	129	1001	1131
15	179	.01650	51.1	147	991	1138
10	192	.01658	39.4	160	983	1143
5	203	.01666	31.8	171	976	1147
PRESS. PSIG	TEMP. °F	CU. FT. PER LB.		HEAT IN BTU PER POUND		
		LIQUID	STEAM	LIQUID	LATENT	STEAM
0	212	.01672	26.8	180	970	1150
2	218	.01675	24.1	186	966	1152
5	227	.01682	20.1	196	961	1156
8	234	.01688	17.9	202	955	1158
9	237	.01690	17.2	205	954	1159
10	240	.01692	16.6	207	953	1160
11	241	.01693	16.0	209	951	1161
12	243	.01695	15.4	212	950	1162
15	250	.01700	13.9	218	945	1163
15	250	.01700	13.9	218	945	1163
20	258	.01707	12.1	227	940	1167
25	266	.01715	10.6	235	934	1169
30	274	.01721	9.5	243	929	1172
45	281	0.1727	8.59	250	924	1174
50	298	.01743	6.68	257	911	1179

60	307	.01753	5.89	277	904	1182
70	316	.01761	5.18	286	898	1184
PRESS. PSIG	TEMP. °F	CU. FT. PER LB.		HEAT IN BTU PER POUND		
		LIQUID	STEAM	LIQUID	LATENT	STEAM
80	324	.01770	4.65	294	892	1186
90	331	.01778	4.25	302	886	1188
100	338	.01785	3.90	309	881	1189
110	344	.01792	3.59	315	875	1191
120	350	.01800	3.34	322	871	1192
125	353	.01802	3.22	325	868	1193
150	366	.01819	2.74	339	857	1195
175	377	.01833	2.40	350	847	1197
200	388	.01847	2.13	362	837	1199
225	397	.01860	1.92	372	828	1200
250	406	.01873	1.74	382	820	1201
275	414	.01885	1.59	390	812	1202
300	422	.01897	1.47	399	804	1203
400	448	.01940	1.11	428	756	1204
600	489	.02020	0.73	474	728	1203
750	513	.02070	0.61	500	700	1200
900	534	.02130	0.49	529	665	1195
1200	574	.02233	0.39	587	624	1183

Notes:

- Data is for gage pressure at one standard atmosphere (14.696 psia)
- Entropy and internal energy shown on standard steam tables is not included for clarity.
- Only pressures commonly used are shown, use of tables from another source is recommended if precision is desired.

PROPERTIES OF SUPERHEATED STEAM

28" Hg (101)	Temperature	150	200	250	350	600
	Volume	2.01	2.05	2.08	2.10	2.27
	Heat	1128	1150	1173	1219	1336
26" Hg (126)	Temperature	150	200	250	350	600
	Volume	1.94	1.97	2.01	2.06	2.19
	Heat	1125	1150	1172	1227	1336
11" Hg (200)	Temperature	250	300	350	450	700
	Volume	1.80	1.84	1.87	1.92	1.99
	Heat	1169	1193	1216	1263	1335
0 psig (212)	Temperature	250	300	350	450	700
	Volume	1.78	1.81	1.84	1.90	2.02
	Heat	1169	1193	1216	1263	1383
5 psig (227)	Temperature	250	300	350	450	700
	Volume	1.75	1.78	1.82	1.87	1.98
	Heat	1167	1192	1134	1263	1383
10 psig (240)	Temperature	300	350	400	500	750
	Volume	1.75	1.78	1.81	1.87	1.98
	Heat	1186	1214	1238	1286	1407
15 psig (250)	Temperature	300	350	400	500	750
	Volume	1.73	1.76	1.79	1.85	1.96
	Heat	1209	1213	1238	1286	1400
60 psig (307)	Temperature	350	400	450	550	800
	Volume	1.67	1.70	1.73	1.78	1.89
	Heat	1207	1233	1268	1307	1430
120 psig (350)	Temperature	400	450	500	600	850
	Volume	1.61	1.65	1.67	1.72	1.83

Heat		1222	1259	1276	1327	1453
150 psig (366)	Temperature	400	450	550	600	850
	Volume	1.58	1.62	1.67	1.70	1.81
	Heat	1217	1245	1299	1324	1452
200 psig (388)	Temperature	450	500	550	650	900
	Volume	1.58	1.61	1.64	1.69	1.80
	Heat	1241	1267	1304	1346	1476
250 psig (406)	Temperature	450	500	550	650	900
	Volume	1.55	1.59	1.62	1.66	1.77
	Heat	1231	1262	1301	1344	1474
300 psig (422)	Temperature	450	500	550	650	900
	Volume	1.53	1.56	1.59	1.64	1.75
	Heat	1236	1256	1286	1340	1472
400 psig (448)	Temperature	500	550	600	700	950
	Volume	1.52	1.56	1.58	1.64	1.74
	Heat	1243	1271	1306	1362	1495
600 psig (489)	Temperature	550	600	650	750	1000
	Volume	1.49	1.53	1.56	1.61	1.71
	Heat	1254	1289	1320	1380	1516
750 psig (513)	Temperature	550	600	650	750	1000
	Volume	1.45	1.49	1.52	1.57	1.68
	Heat	1238	1274	1312	1370	1512
900 psig (534)	Temperature	600	650	700	800	1050
	Volume	1.47	1.49	1.53	1.58	1.68
	Heat	1258	1297	1331	1393	1536

1200 psig (574)	Temperature	600	650	700	800	1050
	Volume	1.40	1.44	1.48	1.54	1.64
	Heat	1220	1268	1310	1378	1537

Note: Value in parenthesis is temperature of steam at saturation for that pressure.