

STRITT & PRIEBE INC.

PROPERTIES OF SATURATED STEAM

Pressure Lbs. per Sq. In.		Steam Temperature (°F)	Sensible Heat of Saturated Liquid (Btu/lb)	Latent Heat of Evaporation (Btu/lb)	Total Heat of Steam (Btu/lb)	Specific Volume of Saturated Steam (cu ft/lb)
Gauge Pressure (psig)	Absolute Pressure (psia)					
25 (Inches Vacuum)	2.45	134	102	1017	1119	142
20 (Inches Vacuum)	4.9	162	129	1001	1130	73.9
15 (Inches Vacuum)	7.35	179	147	990	1137	51.3
10 (Inches Vacuum)	9.8	192	160	982	1142	39.4
5 (Inches Vacuum)	12.25	203	171	976	1147	31.8
0	14.7	212	180	970	1150	26.80
1	15.7	215	183	968	1151	25.20
2	16.7	219	187	966	1153	23.50
3	17.7	222	190	964	1154	22.30
4	18.7	224	192	962	1154	21.40
5	19.7	227	195	960	1155	20.10
6	20.7	230	198	959	1157	19.40
7	21.7	232	200	957	1157	18.70
8	22.7	233	201	956	1157	18.40
9	23.7	237	205	954	1159	17.10
10	24.7	239	207	953	1160	16.50
12	26.7	244	212	949	1161	15.30
14	28.7	248	216	947	1163	14.30
16	30.7	252	220	944	1164	13.40
18	32.7	256	224	941	1165	12.60
20	34.7	259	227	939	1166	11.90
22	36.7	262	230	937	1167	11.30
24	38.7	265	233	934	1167	10.80
26	40.7	268	236	933	1169	10.30
28	42.7	271	239	930	1169	9.85
30	44.7	274	243	929	1172	9.46
32	46.7	277	246	927	1173	9.10
34	48.7	279	248	925	1173	8.75
36	50.7	282	251	923	1174	8.42
38	52.7	284	253	922	1175	8.08
40	54.7	286	256	920	1176	7.82
42	56.7	289	258	918	1176	7.57
44	58.7	291	260	917	1177	7.31
46	60.7	293	262	915	1177	7.14
48	62.7	295	264	914	1178	6.94
50	64.7	298	267	912	1179	6.68
55	69.7	300	271	909	1180	6.27
60	74.7	307	277	906	1183	5.84
65	79.7	312	282	901	1183	5.49
70	84.7	316	286	898	1184	5.18
75	89.7	320	290	895	1185	4.91
80	94.7	324	294	891	1185	4.67
85	99.7	328	298	889	1187	4.44
90	104.7	331	302	886	1188	4.24
95	109.7	335	305	883	1188	4.05
100	114.7	338	309	880	1189	3.89
105	119.7	341	312	878	1190	3.74
110	124.7	344	316	875	1191	3.59
115	129.7	347	319	873	1192	3.46
120	134.7	350	322	871	1193	3.34
125	139.7	353	325	868	1193	3.23
130	144.7	356	328	866	1194	3.12
135	149.7	358	330	864	1194	3.02
140	154.7	361	333	861	1194	2.92
145	159.7	363	336	859	1195	2.84
150	164.7	366	339	857	1196	2.74
155	169.7	368	341	855	1196	2.68
160	174.7	371	344	853	1197	2.60
165	179.7	373	346	851	1197	2.54
170	184.7	375	348	849	1197	2.47
175	189.7	377	351	847	1198	2.41
180	194.7	380	353	845	1198	2.31
185	199.7	382	355	843	1198	2.29
190	204.7	384	358	841	1199	2.24
195	209.7	386	360	839	1199	2.19
200	214.7	388	362	837	1199	2.14
205	219.7	390	364	836	1200	2.09

STRITT & PRIEBE INC.

PROPERTIES OF SATURATED STEAM

Pressure Lbs. per Sq. In.		Steam Temperature (°F)	Sensible Heat of Saturated Liquid (Btu/lb)	Latent Heat of Evaporation (Btu/lb)	Total Heat of Steam (Btu/lb)	Specific Volume of Saturated Steam (cu ft/lb)
Gauge Pressure (psig)	Absolute Pressure (psia)					
210	224.7	392	366	834	1200	2.05
215	229.7	394	368	832	1200	2.00
220	234.7	396	370	830	1200	1.96
225	239.7	397	372	828	1200	1.92
230	244.7	399	374	827	1201	1.89
235	249.7	401	376	825	1201	1.85
240	254.7	403	378	823	1201	1.81
245	259.7	404	380	822	1202	1.78
250	264.7	406	382	820	1202	1.75
255	269.7	408	383	819	1202	1.72
260	274.7	409	385	817	1202	1.69
265	279.7	411	387	815	1202	1.66
270	284.7	413	389	814	1203	1.63
275	289.7	414	391	812	1203	1.60
280	294.7	416	392	811	1203	1.57
285	299.7	417	394	809	1203	1.55
290	304.7	418	395	808	1203	1.53
295	309.7	420	397	806	1203	1.49
300	314.7	421	398	805	1203	1.47
305	319.7	423	400	803	1203	1.45
310	324.7	425	402	802	1204	1.43
315	329.7	426	404	800	1204	1.41
320	334.7	427	405	799	1204	1.38
325	339.7	429	407	797	1204	1.36
330	344.7	430	408	796	1204	1.34
335	349.7	432	410	794	1204	1.33
340	354.7	433	411	793	1204	1.31
345	359.7	434	413	791	1204	1.29
350	364.7	435	414	790	1204	1.28
355	369.7	437	416	789	1205	1.26
360	374.7	438	417	788	1205	1.24
365	379.7	440	419	786	1205	1.22
370	384.7	441	420	785	1205	1.20
375	389.7	442	421	784	1205	1.19
380	394.7	443	422	783	1205	1.18
385	399.7	445	424	781	1205	1.16
390	404.7	446	425	780	1205	1.14
395	409.7	447	427	778	1205	1.13
400	414.7	448	428	777	1205	1.12
450	464.7	460	439	766	1205	1.00
500	514.7	470	453	751	1204	0.89
550	564.7	479	464	740	1204	0.82
600	614.7	489	475	728	1203	0.74
650	664.7	497	483	719	1202	0.69
700	714.7	505	491	710	1201	0.64
750	764.7	513	504	696	1200	0.60
800	814.7	520	512	686	1198	0.56
900	914.7	534	529	666	1195	0.49
1000	1014.7	546	544	647	1191	0.44
1250	1264.7	574	580	600	1180	0.34
1500	1514.7	597	610	557	1167	0.23
1750	1764.7	618	642	509	1151	0.22
2000	2014.7	636	672	462	1134	0.19
2250	2264.7	654	701	413	1114	0.16
2500	2514.7	669	733	358	1091	0.13
2750	2764.7	683	764	295	1059	0.11
3000	3014.7	696	804	213	1017	0.08
3191.5	3206.2	705.4	-	-	-	-

Critical Point - At 3206.2 psia and 705.40 °F the vapor and liquid are indistinguishable. No change of state occurs when pressure increases above the critical point or when heat is added. At the critical point it is no longer referred to water or steam and it is not possible keep the water and steam apart.