

Saturated Steam Tables

	Pressure	kPa	Temperature C	Specific Enthalpy			Specific Volume Steam m ³ /kg
				Water (hf) kJ/kg	Evaporation (hfg) kJ/kg	Steam (hg) kJ/kg	
0.3		30	69.10	289.23	2,336.10	2,625.30	5.2290
0.5	absolute	50	81.33	340.49	2,305.40	2,645.90	3.2400
0.75		75	91.78	384.39	2,278.60	2,663.00	2.2170
0.95		95	98.20	411.43	2,261.80	2,673.20	1.7770
0	gauge	0	100.00	419.04	2,257.00	2,676.00	1.6730
0.1		10	102.66	430.20	2,250.20	2,680.40	1.5330
0.2		20	105.10	440.80	2,243.40	2,684.20	1.4140
0.3		30	107.39	450.40	2,237.20	2,687.60	1.3120
0.4		40	109.55	459.70	2,231.30	2,691.00	1.2250
0.5		50	111.61	468.30	2,225.60	2,693.90	1.1490
0.7		70	115.40	484.10	2,215.40	2,699.50	1.0240
0.9		90	118.80	498.90	2,205.60	2,704.50	0.9230
1.1		110	121.96	512.20	2,197.00	2,709.20	0.8410
1.3		130	124.90	524.60	2,188.70	2,713.30	0.7730
1.5		150	127.62	536.10	2,181.00	2,717.10	0.7140
1.7		170	130.13	547.10	2,173.70	2,720.80	0.6650
1.9		190	132.54	557.30	2,166.70	2,724.00	0.6220
2.2		220	135.88	571.70	2,156.90	2,728.60	0.5680
2.6		260	140.00	589.20	2,144.70	2,733.90	0.5090
3		300	143.75	605.30	2,133.40	2,738.70	0.4610
3.4		340	147.20	620.00	2,122.90	2,742.90	0.4220
3.8		380	150.44	634.00	2,112.90	2,746.90	0.3890
4.5		450	155.55	656.30	2,096.70	2,753.00	0.3420
5.5		550	162.08	684.60	2,075.70	2,760.30	0.2920
6.5		650	167.83	709.70	2,056.80	2,766.50	0.2550
7.5		750	173.02	732.50	2,039.20	2,771.70	0.2270
8.5		850	177.75	753.30	2,022.90	2,776.20	0.2040
11		1100	188.02	798.80	1,986.00	2,784.80	0.1630
13.5		1350	196.62	837.90	1,953.20	2,791.10	0.1360
16		1600	204.38	872.30	1,923.40	2,795.70	0.1170
18.5		1850	211.25	903.10	1,895.80	2,799.00	0.1020
21		2100	217.35	931.30	1,870.10	2,801.40	0.0906
24		2400	224.02	962.20	1,840.90	2,803.10	0.0797
27		2700	230.14	990.70	1,813.30	2,804.00	0.0714
30		3000	235.78	1,017.00	1,787.00	2,804.10	0.0645
35		3500	244.26	1,057.70	1,745.50	2,803.20	0.0554
40		4000	251.94	1,094.60	1,706.30	2,800.90	0.0485
46		4600	260.13	1,135.30	1,661.60	2,796.90	0.0421
50		5000	265.26	1,160.80	1,632.80	2,793.60	0.0386

Heat Emission from Pipes (W/m)

Heat emission from bare horizontal pipes with ambient temperatures between 10°C and 21°C and still air conditions.

Temp. Diff. Steam to Air °C	Pipe Size									
	15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm	100mm	150mm
56	54	65	79	103	108	132	155	188	233	324
67	68	82	100	122	136	168	198	236	296	410
78	83	100	122	149	166	203	241	298	360	500
89	99	120	146	179	205	246	289	346	434	601
100	116	140	169	208	234	285	337	400	501	696
111	134	164	198	241	271	334	392	469	598	816
125	159	191	233	285	321	394	464	555	698	969
139	184	224	272	333	373	458	540	622	815	1133
153	210	255	312	382	429	528	623	747	939	1305
167	241	292	357	437	489	602	713	838	1093	1492
180	274	329	408	494	556	676	808	959	1190	1660
194	309	372	461	566	634	758	909	1080	1303	1852