

Steam Tables for Steriliser Deaeration Performance Check

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Pressure Bar(abs)	Temp t (°C)	Sp Vol m ³ kg ⁻¹	Sp.enthalpy kJ kg ⁻¹ water	Latent heat kJ kg ⁻¹ vapour	Sp.enthalpy kJ kg ⁻¹ steam
Gauge(-1)					
1.0	99.60	1.694	417	2 258	2 675
1.1	102.30	1.549	429	2 251	2 680
1.2	104.80	1.428	439	2 244	2 683
1.3	107.10	1.325	449	2 238	2 687
1.4	109.30	1.236	458	2 232	2 690
1.5	111.40	1.159	467	2 226	2 693
1.6	113.00	1.091	475	2 221	2 696
1.7	115.20	1.031	483	2 216	2 699
1.8	116.90	0.977	491	2 211	2 702
1.9	118.60	0.929	498	2 206	2 704
2.0	120.20	0.886	505	2 202	2 207
2.1	121.80	0.846	511	2 195	2 709
2.2	123.30	0.810	518	2 193	2 711
2.3	124.70	0.770	524	2 189	2 713
2.4	126.10	0.747	530	2 185	2 715
2.5	127.40	0.719	535	2 182	2 717
2.6	128.70	0.693	541	2 178	2 719
2.7	130.00	0.669	546	2 174	2 720
2.8	131.20	0.646	551	2 171	2 722
2.9	132.40	0.625	556	2 168	2 724
3.0	133.5	0.606	561	2 164	2 275
3.1	134.58	0.589	566	2 161	2 366
3.2	135.68	0.573	570	2 158	2 458
3.3	136.78	0.557	575	2 154	2 549
3.4	137.80	0.540	579	2 151	2 641
3.5	138.90	0.524	584	2 148	2 732
3.6	139.84	0.526	588	2 145	2 233
3.7	140.78	0.510	592	2 142	2 735
3.8	141.72	0.494	597	2 140	2 736
3.9	142.66	0.487	601	2 137	2 738
4.0	143.60	0.462	605	2 134	2 739

Note: If the steriliser temperature is 140°C, the partial pressure of steam is 2.6 bar and that of air is only 0.3 bar indicating efficient deaeration. If the temperature is 127°C, the steam is only 1.5 bar the same as air indication poor deaeration. Refer to page 56 for details.

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