

Dryer Sizing and Correction Factors

Table 1
Pressure and Temperature

Pressure (psig)	Temperature (°F)									
	80	85	90	95	100	105	110	115	120	
20	1.00	0.87	0.80	0.71	0.65	0.59	0.53	0.49	0.45	
40	1.30	1.16	1.01	0.91	0.80	0.73	0.66	0.59	0.53	
60	1.40	1.25	1.09	1.98	0.88	0.80	0.72	0.66	0.59	
80	1.50	1.34	1.17	1.06	0.95	0.87	0.79	0.73	0.66	
100	1.55	1.39	1.23	1.12	1.00	0.91	0.82	0.76	0.70	
110	1.58	1.42	1.26	1.15	1.03	0.94	0.86	0.79	0.72	
125	1.63	1.47	1.31	1.19	1.07	0.99	0.91	0.83	0.74	
145	1.69	1.52	1.36	1.24	1.12	1.03	0.94	0.87	0.79	
175	1.75	1.59	1.42	1.30	1.18	1.09	0.99	0.92	0.84	
200	1.80	1.64	1.47	1.35	1.22	1.13	1.03	0.96	0.89	
230	1.82	1.66	1.49	1.37	1.24	1.15	1.05	0.98	0.91	

Table 2
Ambient Air / Cooling Water Temperature

Factor		Ambient Air or Cooling Water Temperature (°F)							
		75	80	85	90	95	100	105	110
Factor	Air Cooling	1.15	1.12	1.09	1.06	1.03	1.00	0.97	0.94
	Water Cooling			1.15				N/A	

Table 3
Outlet Dew Point Capacity Correction Factors

Outlet Dew Point (°F)	38	39	40	41	42	43	44	45	50
Factor	1.00	1.03	1.06	1.09	1.11	1.14	1.17	1.20	1.30

Dryer Sizing

To select a dryer for your application, first find the capacity correction factors that correspond to your compressed air pressure and temperature from Table 1 and the ambient air temperature or cooling water temperature from Table 2. Multiply the two factors together to find the overall capacity correction factor. Multiply a dryer's rated capacity by the overall capacity correction factor to determine the dryer's capacity at your operating conditions. Outlet dew point correction factors may be used when the required dewpoint is greater than 38°F.

