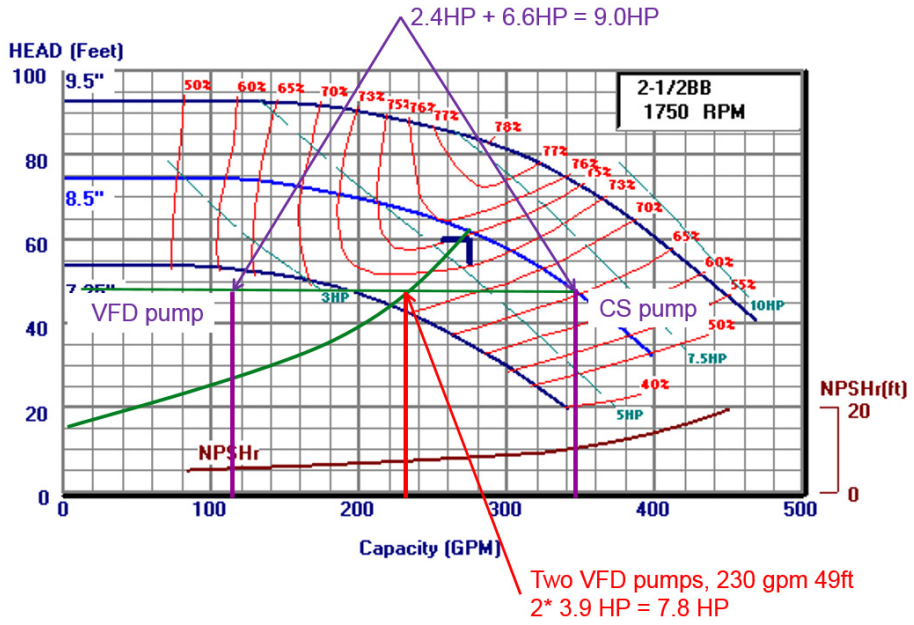
Errata to
Fundamentals of Design and Control of Central Chilled-Water Plants (I-P)
(2017)

August 29, 2025

Shaded items have been corrected since the previously published errata sheet dated March 11, 2025.

Page 38:	Under the section Oil Return, "Using an oil pump can reduce the minimum lift to about 5.5°C" should read "Using an oil pump can reduce the minimum lift to about **10°F**". In third paragraph in the section Absorption Chillers, "Because of absorption chillers' low, the heat rejection system must be about 50% larger than with a compression chiller plant, increasing the cost of condenser water pumps, piping, and cooling towers." should read "Because of absorption chillers' low **COPs**, the heat rejection system must be about 50% larger than with a compression chiller plant, increasing the cost of condenser water pumps, piping, and cooling towers." In the first bullet point in the section Absorption Chillers, the phrase "water at that temperature has the lowest density, enhancing tank stratification and increasing storage capacity" should read "water at that temperature has the **higher** density, enhancing tank stratification and increasing storage capacity."
Page 59:	The SI version was incorrectly included for Figure 3-25; it should be the I-P version, as shown below: 
Page 65:	The SI version was incorrectly included for Equation 3-5; it should be the I-P version, as shown below (bold indicates changes from the SI version): $$NPSHA = \frac{\mathbf{2.31}}{s}(P_a - P_{vp}) + \frac{\left(V_a^2 - V_s^2\right)}{\mathbf{61.3}} + (z_a - z_s) - H_{f,(a \rightarrow s)}$$ Also, in the text beneath Equation 3-5, the second line says "V is velocity (ft/min)" but should say "V is velocity (ft/**s**)."

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Page 160:

The values in Table 5-7 should read as follow:

Table 5-7 Typical Coil Performance Versus Chilled-Water Temperature Difference

Chilled-Water Δ*T*, °F	10	13	16	19	22	25
Coil water pressure drop, ft H_2O	23.5	13.9	9.1	8.3	6.7	4.7
Coil air-side pressure drop, in. H_2O	0.48	0.50	0.52	0.60	0.63	0.78
Rows	6	6	6	8	8	8
Fins per in. (fpi)	7.4	8.3	9.4	7.7	8.6	11.6

Cooling coil pressure air- and water-side drops were determined from a manufacturer's AHRI-certified selection program assuming 500 fpm coil face velocity, smooth tubes, maximum 12 fpi fin spacing, 43°F CHW supply temperature, 78°F/63°F entering air temperature, and 53°F leaving air temperature.

Page 162:

The values in Table 5-8 should read as follow:

Table 5-8 Cooling Coil and Associated Piping Costs
(For 20,000 cfm coil sized at 500 fpm, 42°F CHW supply temperature, 78°F entering dry-bulb temperature, 62°F entering wet-bulb temperature, and 53°F leaving dry-bulb temperature)

Coil							Piping		
Fins per in.	Rows	Air Pressure Drop, in. H_2O	Fluid Δ*T*, °F	Fluid Flow, gpm	Fluid Pressure Drop, ft H_2O	Coil Cost	Pipe Size, in.	Coil Connection	Total Cost
10	4	0.70	10.1	118.7	9.1	$3598	3	$4551	$8149
11	6	0.65	18.2	66.0	7.6	$4845	2.5	$3581	$8426
10	8	0.80	24.9	47.0	5.7	$5956	2	$2101	$8057

Page 165:

The *x*-axis of Figure 5-11 should read "**Condenser Water Temperature/Δ*T***," rather than "Chilled Water Supply Temperature/Δ*T*"

Page 172:

Equation 5-1 $T_A + \Delta T_{CW} = 15 - 0.0006\text{CDD}_{50}$ should read $T_A + \Delta T_{CW} = \mathbf{27 - 0.001CDD_{50}}$.

Equation 5-2 $T_A = 15 - \Delta T_{CW} - 0.0006\text{CDD}_{50}$ should read $T_A = \mathbf{27} - \Delta T_{CW} - \mathbf{0.001CDD_{50}}$.