

**Errata for First Printing**  
*Process Dynamics and Control, 2<sup>nd</sup> Edition (2004)*  
 by Seborg, Edgar, and Mellichamp

Page	Item
7	1 <sup>st</sup> paragraph: Omit reference to Section 1.4.
45	Exercise 2.2: In Fig. E2.2, change “ $T_2$ ” to “ $T_i$ ”.
48	Exercise 2.8, part (v): Change “ $q_j$ ” to “ $q_i$ ”, two times.
86	Below Eq. 4-42, omit “From Example 4.1”.
97	Eq. 4-95: In the second line, change “ $x_{22}$ ” to “ $x_2$ ”.
101	Exercise 4.11: Omit part b(i) and renumber remaining parts. Also, change “ <u>form</u> ” to “form”.
102	Exercise 4.13: Replace the first equation by: $\frac{dh}{dt} = \frac{1}{\pi(D-h)h} (q_i - C_v \sqrt{h})$
102	Exercise 4.17: Replace the second equation by: $\dot{S} = -\mu(S)X / Y_{X/S} + D(S_f - S)$
124	Exercise 5.7: In the equation, change $T_{meas}$ to $T$ . After the equation add, “where $T$ is the temperature at the measurement point.” Add to the Assumptions: “The temperature sensor exhibits no steady-state error.”
125	Exercise 5.10: In the equation, replace “ $G$ ” by “ $\delta$ ”.
131	Eq. 4-41: Change the equation number to 4-40.
133	Figure 6.2: The curve labeled “(i)” should have an “8” below the $\tau_a$ label.
151	Exercise 6.7: In Fig. E6.7b, add the first data point: $P_m=12\%$ at $t=0$ . Change “-3” to “-3 %/psi” in the text.
152	Exercise 6.14: Move “when $M=2$ , $K=3$ , and $\tau=3$ ” from part (d) to the end of part (a).
153	Exercise 6.17: Add the symbol for a computer exercise.
161	Equations for $Y$ and $X$ below (7-9): all of the $n$ subscripts should be $N$ .
169	Figure 7.8: omit “ $t_{73}$ ” and the corresponding “+”.
177	Table 7.3 caption: Change “Example 7.6” to “Example 7.5”.

183	Fig. E7.7: Change $T'$ to $T_m'$ .
194	Last entry in Table 8.1: should be “proportion-al“.
204	Exercise 8.4; <u>Note to the Instructor</u> : the solutions of (d) and (e) require Ch. 9 material.
205	Exercise 8.10: Add the symbol for a computer exercise.
231	Exercise 9.9: In the second line, change “level transmitter” to “temperature transmitter”. Add the following statement to the top of the right column: “For steady-state conditions, the standard thermometer and thermocouple-transmitter outputs are identical”.
238	Example 10.2: In the 2 <sup>nd</sup> line of the Solution: change “2-44 to 2-46” to “2-50 to 2-52”.
240	Fig. 10.6: Interchange the symbols, “ $x$ ” and “ $x_c$ ”.
261	Paragraph below (11-2): change $\tilde{X}'_d(s)$ to $X'_d(s)$ and $\tilde{X}'_u(s)$ to $X'_u(s)$ , two times each.
266	Eq. 11-28: Add “ $G_dD$ ” immediately after the second equals sign.
276	Eq. 11-70: Change $\tau$ to $\tau_I$ .
282	Eq. 11-92: Should be: $-s+1+0.2K_c=0$ . Corrections for the next line: “ $s=1+0.2 K_c$ ” and “ $K_c<-5$ ”.
293	Exercise 11.10: On the diagram, label the outputs of blocks $G_1$ , $G_2$ , and $G_3$ as $Y_1$ , $Y_2$ , and $Y_3$ , respectively.
293	Exercise 11.11: Under “Composition Transmitter Data”, add “(i) the transmitter dynamics are negligible”.
296	Exercise 11.21: Add the symbol for a computer exercise.
331	Exercise 12.9: Add the symbol for a computer exercise.
332	Exercise 12.11: Three lines above (a), replace “returned” by “retuned”.
335	4 <sup>th</sup> line from top: change $\sin(\omega\tau)$ to $\sin(\omega t)$ .
352	Eq. 13-61: change $G_c(s)$ to $G_c(j\omega)$ .
354	Fig. 13.10: The log tic marks for the AR plot should be reversed, as per Fig. 13.9.
360	Exercise 13.9 (3rd line from bottom): change “airstream” to “air stream”.
359-61	Add computer symbols to the following exercises in Ch. 13: # 5-8, 11-13, and 15-18.
407	Exercise 15.3: Move “Available Information” to after item “(c)”.
410	Exercise 15.13: re-name “(c)” as “(b)”.
666	Exercise 24.5(b): Replace “Fig. 24.8” with “Fig. 24.7”.
699	First sentence: Add “recall” before “subscript $T$ ”.

712	Right hand column: “approximation of higher-order, 142” should be indented only once.
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