

Errata for the 2nd Printing
Process Dynamics and Control, 2nd Edition (2004)
by Seborg, Edgar, and Mellichamp

Page	Item
75	Exercise 3.9: add computer symbol
75	Fig. E3.4a: add a space between “ t ” and “min”.
76	Exercise 3.11: add computer symbol
125	In 5 th line, change T_{meas} to T
176	Example 7.5: In the 2 nd line, after “ $\Delta t=1$ ”, add the sentence: “Initially the system is at rest.” In the 4 th line, add (7-36) after “difference equation”.
177	Table 7.2: Delete the first row (i.e, the two zeros)
204	Exercise 8.4: Omit parts (d) and (e) and the note below (e).
260	In the last line, replace “Section 4.3” by “Example 4.5”.
263	Fig. 11.7: replace both τ_1 and τ_2 by τ .
279	Eq. 11-86: superscripts “1” and “2” in “ p_1 ” and “ p_2 ” are too large. (See Eq. 11-85 for their relative sizes.).
290	Exercise 11.2: Replace “ $K_m=1.7$ psi/ft” by “ $K_m=4$ mA/ft”.
293	Exercise 11.11: Add “transmitter dynamics are negligible.” Under “Composition Transmitter Data”.
304	Eq. (12-15): Replace “ $(1-\tau_a)$ ” by “ $(1-\tau_a s)$ ”.
331	Exercise 12.7: in (a) (i), change “Table 12.4” to “Table 12.5”.
352	Eq. (13-61): Add “ K_c ” before parentheses after first equals sign.
369	Fig. 14.5: the phase angle, ϕ_{OL} , should approach 0 degrees at $\omega=0.01$ rad/min.
405	Fig. 15.15: replace τ_L by τ_d
425	Figure 16.5: Inside the circle at the right edge of the figure, change “PC” to “FC”.

435	Exercise 16.1: Change the 2 nd sentence to: “Briefly indicate which of the two systems below would have its closed-loop performance enhanced significantly by application of cascade control (see Fig. 16.4 for notation and assume $G_{p2}=1$ and $G_{d1}=G_{p1}$). Using the controller settings shown below, evaluate the effect of a unit step disturbance in D_I on both systems A and B.”
436	For the “System A” and “System B” headings at the top of the page: The last row ($K_{c1}=0.5$, $\tau_{I1}=15$, $K_{c2}=1.0$) should appear at the end of the “System A” column. Similarly, the next to last row ($K_{c1}=2.5$, $\tau_{I1}=15$, $K_{c2}=0.25$) should appear at the end of the “System B” column. Also change “ G_p ” to “ G_{p1} ” near the top of both columns.
438	Fig. E16.15: change “HS” to “>” and “LS” to “<” in the circles near top of the figure..
438	Exercise E16.16: Add this sentence at the end: “Determine the valve action (A-O or A-C) for the flow control valve and whether the level controller should be reverse or direct acting.
440	Exercise 16.22: After “operation” in the 4 th line, add: “(concentration controller output P_{ac} is less than or equal to 80%”.
511	Insert “For” before “Single-loop” in 2 nd line from bottom of page.
515	Add “3” after “layer” in 3 rd line of 2 nd paragraph.
519	Add “one” after “there is only” in 2 nd line from bottom of page.
523	Change “adding” to “subtracting” and replace “to” with “from” in the 7 th line from bottom of the page. Also, change N_V to N_F in the 8 th line of the 1 st paragraph.
531	Exercise 19.6: In line 5, replace “bl” by “bbl”.
571	Eq. 21-5: replace “ u ” by “ μ ”.
575	Table 21.2: In the 1 st line of the 3 rd column, replace “20.76” by “207.6”.
578	Table 21.3: In the heading for each of the 3 columns, replace $\sigma_{\bar{x}}$ with $\hat{\sigma}_{\bar{x}}$.
579	In the 1 st line below (21-23), replace “Eq.21-27” with “Eq.21-23”.
579	Eq. (21-24): replace $\sigma_{\bar{x}}$ with $\hat{\sigma}_{\bar{x}}$. Also, in the first line below Eq. (21-24), replace $\sigma_{\bar{x}}$ with $\hat{\sigma}_{\bar{x}}$.
590	Exercise 21.10: “USL” and “LSL” should be switched.:
628	Eqs. (23-7) and (23-8): Replace x_D by \bar{x}_D and x_B by \bar{x}_B .
634	6 lines below heading: Replace “ H_S ” by “ $20H_S$ ”.

663	Fig. 24.8: The “X” symbol should be removed from the circle in upper left hand corner of the drawing and replaced with the “RC over 2” label that now is drawn just outside and to the right of that circle.
698	Under “Modeling Assumptions”: Change H_R to V_R in #2 & 4 Change H_F to V_F in #4 Change H_T to V_T in #5
708	Omit entry for “z-domain” under “Final value theorem”.