

ERRATA

Continuum Mechanics: Elasticity, Plasticity, Viscoelasticity by Ellis Harold Dill

Page	Correction
7	After (1.4.6), replace \mathbf{X} by \mathbf{X} .
10	Equation (1.4.29) should read $d\mathbf{A} = (\mathbf{F} \cdot d_1\mathbf{X}) \times (\mathbf{F} \cdot d_2\mathbf{X})$.
14	Equation (1.6.9) should have $v^2 _2 = \frac{\partial v^2}{\partial x^2} + \frac{v^1}{x^1}$.
15	Equation (1.6.10) for a^2 the term $\frac{\partial v^2}{\partial x^1} v^2$ should be $\frac{\partial v^2}{\partial x^2} v^2$.
19	In Eq. (1.8.5), replace S by A .
44	Eq. (1.14.59) should not have a minus sign.
45	Sentence should read "Consider the following deformation of a square rod."
45	Last line should read Figure 1.15.1.
46	Figure should be labeled 1.15.1.
46	Problem 5 should read: "Principal stretches."
47	Problem 8 should refer to (1.8.12).
56	In (2.3.3) and (2.3.6), φ_3 should be φ_2 .
56	In (2.3.7), subscripts should be C and not E .
57	Line before (2.3.10), reference should be to (2.3.8).
57	In (2.3.14), φ_3 should be φ_2 .
58	In (2.3.16), φ_3 should be φ_2 .
67	Replace Holgar by Hoger.
68	Equation 2.5.22 should read $S_a : \dot{\mathbf{E}}_a = \dots$
68	Equation 2.5.23 should read $S_0 : \dot{\mathbf{E}}_0 = \dots$
72	In equation 2.6.17, $C_{1133} = C_{1122}$. (Case 5 is the same as case 6.)
73	Replace K by \mathcal{K} in (2.7.2) and (2.7.3).
91	Equation 2.11.37 missing final bracket: $\dots III_\epsilon$)
91	Line after (2.11.38) should read "Note that this $\boldsymbol{\epsilon} \dots$ "
92	Line before (2.11.44) should read $J = (1 + \epsilon_1)(3 - \epsilon_1^2) / 9$
97	Equation 2.11.68 should read $T_k = \dots - 2a_2 J^{-1/3} (\alpha_k^{-2} - \frac{1}{3} I_2 I_3^{-1}) + \dots$
97	Equation 2.11.69, change \bar{I}_3 to \bar{I}_2 .
100	Eq. (2.11.83) should read $\mathbf{e} = \mathbf{R} \cdot \sum_{i=1}^3 \ln(\alpha_i) \mathbf{N}_i \mathbf{N}_i \cdot \mathbf{R}^T$.
166	7th line after Eq. 4.3.7 should read $\bar{c} = (\bar{e}_1 + \bar{e}_2 + \bar{e}_3) / \sqrt{3}$.
167	fourth line before (4.3.8) should have $\sigma_1^2 - \sigma_1 \sigma_2 + \sigma_2^2 = Y^2$.

- 173 Equation (4.5.2) should read $\dot{\boldsymbol{\varepsilon}}^P = +\sqrt{\frac{2}{3}}\dot{\boldsymbol{\varepsilon}}^P:\dot{\boldsymbol{\varepsilon}}^P$
- 173 Equation (4.5.3) should read $\dot{\boldsymbol{\varepsilon}}^P = \dots$
- 174 Aftyer Eq. 4.5.11, $\boldsymbol{\eta}$ should be bold face.
- 177 Equation (4.6.4), replace $\boldsymbol{\tau}$ by $\dot{\boldsymbol{\tau}}$.
- 179 The line following (4.6.16) should have $\dot{\boldsymbol{\varepsilon}}_{11}^P < 0$.
- 180 Equation (4.6.22)₂ should read $\boldsymbol{\varepsilon}_{11}^P = \dots$
- 186 Eq. 4.7.22 should read $\dot{\boldsymbol{\beta}} = \frac{2}{3}c\dot{\boldsymbol{\varepsilon}}^P - \gamma\boldsymbol{\beta}\dot{\boldsymbol{\varepsilon}}^P$
- 186 Eq. 4.7.23: replace H by h
- 221 Fig. 5.1.7: replace μ_3 and η_3 by μ_N and η_N
- 222 Eq (5.1.53) should read $\bar{\boldsymbol{\sigma}}(t) = \int_0^t \kappa(t-\tau)\dot{\boldsymbol{\varepsilon}}(\tau)d\tau$.
- 249 Figure 6.5.3 axis should read Log ΔK .
- 258 Delete extra "system is" in the line following (7.1.35).
- 258 Delete extra "can be" in the second line following (7.1.38).
- 277 Equation (7.3.28) should read $a_{ij} = A_{ik} A_{jk}$.
- 290 Second line after (7.4.23) should read $\mathbf{b}_k \mathbf{a}^k$.
- 299 Eq. 7.4.76 missing subscript: $\dots(\det \mathbf{T})\mathbf{A}_0$.
- 303 Equation (7.4.101) should read $\mathbf{E}_2 = \mathbf{1} - \mathbf{E}_1$.
- 304 After (7.4.105), *spectral* should be in italics.
- 311 Footnote 2: fymmetric should read symmetric.
- 312 Sentence should read "... choice of basis depends **on** the..."
- 313 First sentence should read "The determinant of the coefficient matrix is"
- 313 Second equation should be
- $$\begin{vmatrix} 2 & 2 & 2 \\ \alpha_1 + \alpha_2 & \alpha_2 + \alpha_3 & \alpha_3 + \alpha_1 \\ \alpha_1^2 + \alpha_2^2 & \alpha_2^2 + \alpha_3^2 & \alpha_3^2 + \alpha_1^2 \end{vmatrix} = 2 \begin{vmatrix} 1 & 1 & 1 \\ \alpha_1 & \alpha_2 & \alpha_3 \\ \alpha_1^2 & \alpha_2^2 & \alpha_3^2 \end{vmatrix} \neq 0$$
- 313 Case 3, line 2, \mathbf{A} should be \mathbf{A} .
- 330 Problem 11 should read Solve (7.3.82)...
- 330 Problem 17 should read $((\mathbf{T} \cdot \mathbf{e}_1) \times \mathbf{e}_2) \cdot \mathbf{e}_3$.

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