

ERRATA
as of 30 Nov 2009

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 $v^2 l_2 = \frac{\partial v^2}{\partial x^2} + \frac{v^1}{x^1}$.
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 $S_0 : \dot{\mathbf{E}}_0 = \dots$
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 $J = (1 + \epsilon_1)(3 - \epsilon_1^2) / 9$
100	Eq. (2.11.83) should read $\mathbf{e} = \mathbf{R} \cdot \sum_{i=1}^3 \ln(\alpha_i) \mathbf{N}_i \mathbf{N}_i \cdot \mathbf{R}^T$.
167	fourth line before *4.3.8) should have $\sigma_1^2 - \sigma_1 \sigma_2 + \sigma_2^2 = Y^2$.
173	Equation (4.5.3) should read $\dot{\bar{\boldsymbol{\epsilon}}}^P = \dots$
177	Equation (4.6.4), replace $\boldsymbol{\tau}$ by $\dot{\boldsymbol{\tau}}$.
179	The line following (4.6.16) should have $\dot{\epsilon}_{11}^P < 0$.
180	Equation (4.6.22) ₂ should read $\epsilon_{11}^P = \dots$

- 222 Eq (5.1.53) should read $\bar{\sigma}(t) = \int_0^t \kappa(t - \tau) \ddot{\epsilon}(\tau) d\tau$.
- 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: $(\det \mathbf{T}) \mathbf{A}_0$.
- 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, A should be \mathbf{A} .
- 330 Problem 17 should read $((\mathbf{T} \cdot \mathbf{e}_1) \times \mathbf{e}_2) \cdot \mathbf{e}_3$.