

Errata for: CLASSICAL AND COMPUTATIONAL SOLID MECHANICS
Advanced Series in Engineering Science -Volume 1, Y. C. FUNG
and PIN TONG, 2001, World Scientific Publishing Co. Pte. Ltd.

No.	Page No.	Line No.	Change	to
1	viii	27	informulating	in formulating
2	6	Eq. (5)	$p'_1 u_n$	$p'_n u_n$
3	8	4	$i=1,2,\dots,n$	$i,j=1,2,\dots,n$
4	8	13	(E) The principle of virtual work	(G) The principle of virtual work
5	34	7	(a), (b)	(a) and (b)
6	35	Eq. (3)	$\delta_{ij} dx^i dx^i$	$\delta_{ij} dx^i dx^j$
7	37	5	$g_{12} = (\cos \theta_2)(-\theta_1 \sin \theta_1) + \dots$	$g_{12} = (\cos \theta_2)(-\theta_1 \sin \theta_2) + \dots$
8	44	14	$\bar{\zeta}_{ij}(\bar{x}, \bar{x}_2, \bar{x}_3) = \beta_{ik} \beta_{js} \zeta_{ks}(x_1, x_2, x_3).$	$\bar{\zeta}_{ij}(\bar{x}_1, \bar{x}_2, \bar{x}_3) = \beta_{ik} \beta_{js} \zeta_{ks}(x_1, x_2, x_3).$
9	45	3 from the bottom	A_k^j	B_k^j
10	45	2 from the bottom	$A(\alpha, j, k,)$	$A(\alpha, j, k)$
11	46	1	A_k^j	B_k^j
12	46	3	$\bar{A}(\alpha, j, k) \bar{\xi}^\alpha = \bar{A}_k^j = \frac{\partial \bar{x}^j}{\partial x^r} \frac{\partial x^s}{\partial \bar{x}^k} A_s^r$	$\bar{A}(\alpha, j, k) \bar{\xi}^\alpha = \bar{B}_k^j = \frac{\partial \bar{x}^j}{\partial x^r} \frac{\partial x^s}{\partial \bar{x}^k} B_s^r$
13	46	12	$[A(i_1, i_2, \dots, i_r)]$	$[A(\alpha, i_1, i_2, \dots, i_r)]$
14	46	13	$A(\alpha, i_2, \dots, i_r) \zeta^\alpha$	$A(\alpha, i_1, i_2, \dots, i_r) \zeta^\alpha$
15	46	14	$A_{k_1 \dots k_p}^{j_1 \dots j_q}$	$B_{k_1 \dots k_p}^{j_1 \dots j_q}$
16	47	Eq. (1)	$\bar{x}_i = a_{ij} x_j + b_i$	$\bar{x}_i = \beta_{ij} x_j + b_i$

17	47	4	where a_{ij} and	where β_{ij} and
18	47	Eq. (2)	$\frac{\partial \bar{x}_i}{\partial x_j} = a_{ij}$	$\frac{\partial \bar{x}_i}{\partial x_j} = \beta_{ij}$
19	48	Eq. (3)	$\Gamma_{\alpha\beta}^i(x^1, x^2, x^3) = \frac{1}{2} g^{i\sigma} \left(\frac{\partial g_{\sigma\beta}}{\partial x^\alpha} + \frac{\partial g_{\alpha\sigma}}{\partial x^\beta} - \frac{\partial g_{\alpha\beta}}{\partial x^\sigma} \right)$	$\Gamma_{\alpha\beta}^i(x^1, x^2, x^3) = \frac{1}{2} g^{i\sigma} \left(\frac{\partial g_{\sigma\beta}}{\partial x^\alpha} + \frac{\partial g_{\alpha\sigma}}{\partial x^\beta} - \frac{\partial g_{\alpha\beta}}{\partial x^\sigma} \right)$
20	48	23	see Prob. 2.24, p. 55	see Prob. 2.24, p. 63
21	49	18	$+\Gamma_{\sigma\gamma}^{\alpha_p} \mathbf{r}_{\beta_1 \cdots \beta_{q-1} \beta_q}^{\alpha_1 \cdots \alpha_{p-1} \sigma} -$	$+\Gamma_{\sigma\gamma}^{\alpha_p} T_{\beta_1 \cdots \beta_{q-1} \beta_q}^{\alpha_1 \cdots \alpha_{p-1} \sigma} -$
22	50	15	coordinate	coordinate
23	51	Eq. (5)	$M = \iiint_V \rho_0(x_1, x_2, x_3) dx_1 dx_2 dx_3$	$M = \iiint_V \rho_0(x_1, x_2, x_3) dx_1 dx_2 dx_3$
24	52	14	Eq. (5)	Eq. (7)
25	53	10	$A = A_1 \mathbf{i}_1 + A_2 \mathbf{i}_2 + A_3 \mathbf{i}_3$	$A = A_1 \mathbf{i}_1 + A_2 \mathbf{i}_2 + A_3 \mathbf{i}_3$
26	58	15	coordinate	coordinate
27	59	14,15	$\partial g_{ij} / \partial \theta^j, \partial g_{ik} / \partial \theta^i$	$\partial g_{ik} / \partial \theta^j, \partial g_{jk} / \partial \theta^i$
28	64	2	Γ_{mm}^r	Γ_{mn}^r
29	64	8	$\mathbf{g}_1, \mathbf{g}_2 \times \mathbf{g}_3$	$\mathbf{g}_1 \cdot \mathbf{g}_2 \times \mathbf{g}_3$
30	64	9	$\mathbf{g}_1, \mathbf{g}_2 \times \mathbf{g}_3$	$\mathbf{g}_1 \cdot \mathbf{g}_2 \times \mathbf{g}_3$
31	64	9	$\mathbf{g}^1, \mathbf{g}^2 \times \mathbf{g}^3$	$\mathbf{g}^1 \cdot \mathbf{g}^2 \times \mathbf{g}^3$
32	65	Prob. 2.33	$(\nabla u)^T = e_r \frac{\partial u}{\partial r} + \frac{e_\theta}{r} \frac{\partial u}{\partial \phi} +$	$(\nabla u)^T = e_r \frac{\partial u}{\partial r} + \frac{e_\phi}{r} \frac{\partial u}{\partial \phi} +$
33	74	10	permutation	permutation
34	84	11	β	$\beta \neq 0$
35	84	14 from bottom	and b_j are real numbers and at last one of them is not zero.	$b_j \neq 0$ are real numbers.
36	86	6	$\sigma_n = \frac{(\sigma_1 + \sigma_2)}{2}$	$\sigma_n = \pm \frac{(\sigma_1 + \sigma_2)}{2}$
37	87	7	of sec 3.7	of stress tensor of
38	87	8	means	mean
39	93	Fig. 3.12:2	x_1, x_2, x_3 and $\bar{x}_1, \bar{x}_2, \bar{x}_3$	x^1, x^2, x^3 and $\bar{x}^1, \bar{x}^2, \bar{x}^3$
40	94	4 from bottom	(3.12:1)	(3.12:9)

41	95	3	$\sigma_{ij} \neq \sigma_j^i \neq \sigma_i^j$	$\sigma_{ij} \neq \sigma_j^i$
42	95	Eq. (2)	$\tau^{ji} v_i = T^{\nu i}$	$\tau^{ji} v_j = T^{\nu i}$
43	95	29	must	much
44	96	3 from the bottom	zero	is zero
45	101	last	$\frac{\partial u_j}{\partial x_j}$	$\frac{\partial u_j}{\partial x_i}$
46	102	11	evaluted	evaluated
47	105	1	tensor	symbol
48	107	Eq. (5)	$da^3 = 0$	$d\bar{a}^3 = 0$
49	108	15	unknowns	unknowns
50	121	Eq. (5)	$= \sum_{i=1}^3$	$= 2 \sum_{i=1}^3$
51	124, 125	Equilibrium Equations	Covariant indices	Contravariant indices
52	125	9	$\Gamma_{21}^2 = \Gamma_{21}^2 = \frac{1}{r}$	$\Gamma_{12}^2 = \Gamma_{21}^2 = \frac{1}{r}$
53	128	20	tensor	symbol
54	139	1	σ_{ij}	σ^{ij}
55	203	Eq. (1)	$e_{ij} = \frac{1}{2} \left[\partial u_j \partial u_i + \frac{\partial u_i}{\partial x_j} - \frac{\partial u_k}{\partial x_i} \frac{\partial u_k}{\partial x_j} \right]$	$e_{ij} = \frac{1}{2} \left[\frac{\partial u_j}{\partial u_i} + \frac{\partial u_i}{\partial x_j} - \frac{\partial u_k}{\partial x_i} \frac{\partial u_k}{\partial x_j} \right]$
56	204	21	σ_i	α_i
57	209	13	(7)	(6)
58	409	13	internal	total

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No.	Page No.	Line No.	Change	to
1	52	2	$j=1,2,3$	$i=1,2,3$
2	52	5	$(e_j \cdot e'_i) = \beta_{ij}$	$(e_j \cdot e'_i) \equiv \beta_{ij}$
3	120	Case 2 in fig. 5.4	$\text{Slop} = \frac{\partial y}{\partial x}$	$\text{Slop} = \frac{\partial v}{\partial x}$
4	131	Eq. (5.10-1)	$\frac{\partial v}{\partial x} \quad \frac{\partial v}{\partial y} \quad \frac{\partial v}{\partial z}$	$\frac{\partial v}{\partial x} \quad \frac{\partial v}{\partial y} \quad \frac{\partial v}{\partial z}$
5	131	Eq. (5.10-2)	$-\frac{1}{2} \left(\frac{\partial u}{\partial z} + \frac{\partial w}{\partial x} \right)$	$-\frac{1}{2} \left(\frac{\partial u}{\partial z} - \frac{\partial w}{\partial x} \right)$
6	146	11	tensor	symbol
7	146	Eq. (6.1-7)	$\Omega_k \equiv \varepsilon_{kij} \Omega_{ij} \text{ i.e., } \Omega \equiv \text{curl } V$	$\Omega_k \equiv \frac{1}{2} \varepsilon_{kij} \Omega_{ij} \text{ i.e., } \Omega \equiv \frac{1}{2} \text{curl } V$

M.H. Abolbashari, Prof.
 Mechanical Engineering Department,
 Ferdowsi University of Mashhad,
 PO Box 91775-1111, Mashhad, Iran
abolbash@um.ac.ir

Tel: +98-5138805004

Fax: +98-5138763304