

ERRATUM

“Fatigue Life Prediction for Complex Load Versus Time Histories,” by N. E. Dowling, published in the July issue of the *JOURNAL OF ENGINEERING MATERIALS AND TECHNOLOGY*, Vol. 105, No. 3, pp. 206–214.

Page 206: In the Introduction, the eighth line should read, “This paper considers these subjects,” The first line of the section “Life Predictions Based on Load” should read, “It is useful to briefly describe the traditional S-N,”

Page 207: The second line under equation (2) the word “curves” should be “curve.”

Page 208: Under equation (3) the following equation should be added.

For the example history of Fig. 1(b)

$$\sum_{\text{one rep.}} \left(\frac{n_i}{N_i} \right) = \frac{1}{N_{2-3}} + \frac{1}{N_{6-7}} + \frac{1}{N_{5-8}} + \frac{1}{N_{1-4}}$$

Line 36 under “General Description of the Local Strain Approach” the word “load” should be “local.”

Page 210: The last two lines of the 2nd paragraph under “Estimation of Notch Stress-Strain Response” the sentence should read: “Finally, using the strain history from the previous calculation, and with the cyclic stress-strain curve now used as a baseline curve, estimate the stress-strain response, such as Fig. 6(d).”

Two lines under this sentence the word “of” should be changed to “and.”

Page 213: The first paragraph, lines 6 and 7, “and also in the earlier section of this chapter on Cyclic Stress-Strain Behavior,” should be deleted.

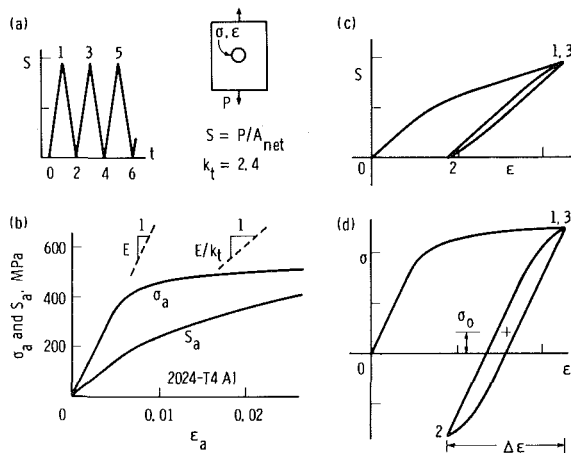


Fig. 6 Estimation of local notch stress and strain for zero to maximum loading: (a) applied load history, (b) baseline stress-strain and load-strain curves, (c) load versus notch strain response, and (d) notch stress versus notch strain response

Page 214: Reference 26, “1977” should be in italics. Reference 51, the year “1979” should be inserted.

The correct figure captions are printed below:

Fig. 2 Use of a constant S-N curve with the Palmgren-Miner rule to predict fatigue life for variable amplitude loading

Fig. 3 Modified Goodman diagram approach to estimating effect of mean stress

Fig. 5 Effect of initial overstrain on strain-life behavior of 2024-T4 aluminum (Topper and Sandor)

Fig. 8 Estimates of: (a) load versus notch strain; (b) notch stress versus notch strain, for load history of Fig. 1(b) applied to the notched member and material of Fig. 6

Corrected versions of Figs. 6 and 8 are printed below:

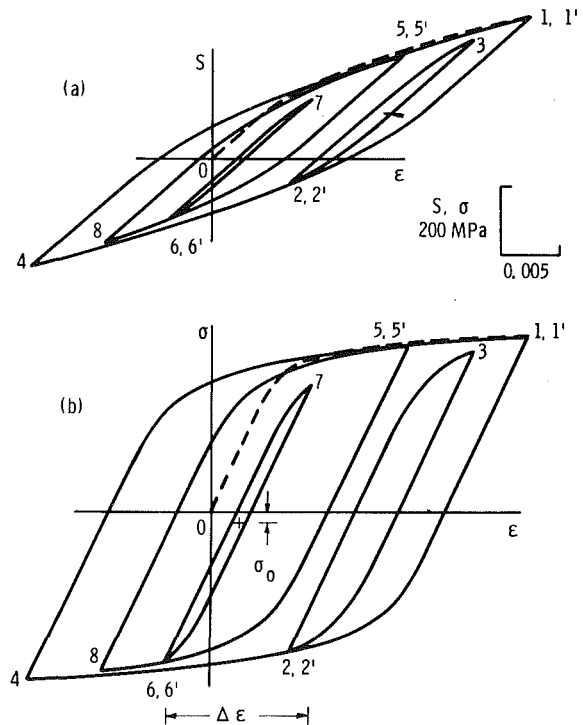


Fig. 8 Estimates of (a) load versus notch strain, and (b) notch stress versus notch strain, for load history of Fig. 6 applied to the notched member and material of Fig. 6