CORRIGENDA

A Continuum Theory of Plane Strain Cyclic Flaw Growth in Structural Materials with Applications to Service Life Cycle Analysis and Subcritical Flaw Growth Experimental Philosophy, H. C. Hagendorf, *International Journal of Fracture* 15 (1979) R155-R160.

The lines beginning on page R157 should have read:

$-K_{min} = (1-R)K$ where $K = K_{max}$ can be regarded as the continuum mechanical crack driving force causing fatigue crack growth rates da/dN where N represents the number of complete fluctuations in $\sigma(t)$.

On a Method of Calculation of the Stress Intensity Factors for a Curvilinear Crack of Variable Length, V. A. Vainshtok, *International Journal of Fracture* 16 (1980) R53-R56.

The correct form of eqns. (6) and (8) are

$$K_I^2 + K_{II}^2 = - \frac{2E}{(\kappa+1)\ (\nu+1)} \vec{Q}_k^T, \frac{\partial[K]}{\partial \ell} \vec{Q}_k, \quad k = 1,n \tag{6}$$

$$K_I K_{II} = \frac{1}{\Delta S} \ \frac{E}{(\kappa+1)\ (\nu+1)} \vec{Q}_k^T \frac{\partial[K]}{\partial \theta} \vec{Q}_k \tag{8}$$

Maximum Load Toughness, O. L. Towers and S. J. Garwood, *International Journal of Fracture* 16 (1980) R85-R90.

The fourth and seventh paragraphs, pp. R85 and R86, respectively, should read:

Values of fracture toughness corresponding to initiation of tearing have been used in the past for safety analysis. For a material exhibiting increasing resistance to tearing after initiation as shown schematically in Fig. 2, this approach can be highly conservative and unrealistic. Ideally, an analysis is required which compares the variation of fracture toughness with increasing crack length, (termed an "R-curve") with the variation in available energy with increasing crack length (known as the driving force curve) in order to establish a point of instability (tangency of the resistance curve with the driving force curve) []]. In practice, however, this is extremely complex and, as yet, the determinatioı of driving force curves are in the early stages of development, particular for complicated structural situations and where large scale yielding is present.

If we assume that the R-curve shown in Fig. 4 is geometry independent (discussed later), it can be seen that instability would occur under load control for the CT and SENB3 geometries at point X (as the G_D - correspond ing to driving G - and the G_R - corresponding to resistance G - curves are tangential at the point). For the CCT geometry under load control, howeve tangency of the G_D and the G_R curves has yet to occur at point X, and thus the structurally relevant CCT geometry is more stable under load control than the CT or SENB3 geometries. Under displacement control, however, the G_D curve of the CCT geometry is close to tangency with the G_R curve at X, whereas the G_D curves of the CT and SENB3 geometries cannot achieve tangency with the G_R curve, as they have negative slopes. Despite the potential instability of the displacement controlled CCT geometry, it can be seen in Fig. 4 that the displacement controlled G_D curve still has a lower slope than the load controlled G_D curve, and hence instability under load control will still occur at a lower G than instability under displacement control and, therefore, instability in the displacement controlled situation will still occur after maximum load. In conclusion, the inference taken from Fig. 4 is that displacement controlled maximum load values of G obtained in CT or SENB3 geometries will be underestimates of maximum load or instability point values of G in the more structurally relevant CCT geometry.

Reference [2] should be:

[2] O. L. Towers and S. J. Garwood, *Welding Research International* 9 (1979) 56-103.

as this source is more easily accessible.

The Limit Load of a C-Shaped Specimen, Pan Hao, *International Journal of Fracture* 16 (1980) R99-R102.

Eqn. (2) should be extended to read:

$$M_L/Bkr_2^2 = \lambda(R/r_2)^2 + \ldots + P_L/Bkr_2 \cdot (R/r_2)\sin\beta = P_L/Bkr_2 \cdot (x+a)/r_2$$

Reference to the critical value ψ_B^* should be:

If $\psi_B > \psi_B^*$, the logarithmic spiral sectors BCD and B'C'D' will not overlap, but separate from one another.

There are nine, not eight, entries in Table I, and the left-hand caption should be b/r_2.

We regret any inconvenience caused by errors having crept into text and hope these Corrigenda resolve any misinterpretation.