

CORRIGENDUM

"Analysis of Crack Opening Angle for Large Amounts of Growth" by L. Braga and C.E. Turner, *International Journal of Fracture* 65 (1994) R43-R48.

The authors have brought to the attention of the Editorial Staff several serious errors made in preparation of the above referenced manuscript for printing. Because we realize that this will have caused confusion and inconvenience to the readers as well as concern to the authors we have made the corrections in the following manner so that any interested reader can replace the incorrect sections of the above referenced item with the following. The primary change will be the replacement of θ for the incorrect ϕ in the material beginning just before Eqn. (2a,b) through Eqn. (5a) on pages R44 and R45.

Thus for an increment in the bend angle, θ_{pl} , and assuming small angles of bending so that $\sin \theta_{pl} \approx \theta_{pl}$,

$$dV_{pl} = (a_c + r^*_{pl} b_c) d\theta_{pl} \text{ and } dq_{pl} = [(S/2) + c] d\theta_{pl}/2 \quad (2a, b)$$

For the case, as here, where the slope is constant, by eliminating $d\theta_{pl}$

$$(a_c + r^*_{pl} b_c) / [1 + (2c/S)] = C \quad (3a)$$

where C is the constant slope, dV_{pl}/dq_{pl} , multiplied by S/4. More conveniently, (3a) can be re-expressed in terms of the initial sizes and crack growth, Δa , to give

$$[(a_o + r^*_{pl} b_o) + (1 - r^*_{pl}) \Delta a] = C [1 + (2c/S)] \quad (3b)$$

This relationship is possible if

$$(S/4) (dV_{pl}/dq_{pl}) = a_o + r^*_{pl} b_o \quad (4a)$$

and $c = n\Delta a$ where

$$n = 2(1 - r^*_{pl}) / (dV_{pl}/dq_{pl}) \quad (4b)$$

It is of course quite possible to derive a value of r that defines an apparent centre of rotation on the axis of symmetry, implying a total rather than incremental analysis. A derivation for r_{pl} , consistent with the above analysis gives

$$\theta_{pl} = 4q_{pl}/S = V_{pl}/(a_c + r_{pl} b_c) \quad (5a)$$