

Size-effect and intralaminar fracture of fibre reinforced composites: latest advances

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Abstract

The size effect method based on the seminal work of Bažant and Planas [1], has been extended in previous investigation and used to obtain the R-curve associated with the intralaminar fracture toughness of fibre reinforced composite materials.

Using the size effect method, several experimental methodologies were developed to measure the R-curve associated with the crack propagation in the longitudinal direction in both tension [2] and compression [3]; in shear [4] and also at extreme temperatures [5] or at high-strain rate [6].

The latest developments on the size effect method, concerning the determination of the R-curve under mixed mode and the determination of the cohesive law, are reported here.

References

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