



DOWNLOAD



Full-Field Strain Methods for Investigating Failure Mechanisms in Triaxial Braided Composites

By Justin D. Littell

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. Recent advancements in braiding technology have led to commercially viable manufacturing approaches for making large structures with complex shape out of triaxial braided composite materials. In some cases, the static load capability of structures made using these materials has been higher than expected based on material strength properties measured using standard coupon tests. A more detailed investigation of deformation and failure processes in large-unit-cell-size triaxial braid composites is needed to evaluate the applicability of standard test methods for these materials and to develop alternative testing approaches. This report presents some new techniques that have been developed to investigate local deformation and failure using digital image correlation techniques. The methods were used to measure both local and global strains during standard straight-sided coupon tensile tests on composite materials made with 12- and 24-k yarns and a 0 60 -60 triaxial braid architecture. Local deformation and failure within fiber bundles was observed and correlations were made between these local failures and global composite deformation and strength. This item ships from La Vergne, TN. Paperback.



READ ONLINE
[1.57 MB]

Reviews

Extensive guide for ebook lovers. It generally does not cost excessive. Your way of life span will likely be convert the instant you complete looking at this ebook.

-- **Rocky Dach**

Certainly, this is the very best work by any author. It is amongst the most remarkable publication i have got study. I am just happy to inform you that this is actually the greatest pdf i have got study inside my individual daily life and can be he very best publication for at any time.

-- **Gilbert Rippin**