
Modeling of structural technological stresses in fibrous composite materials

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The paper considers an analytical method for calculating structural process of residual stresses in a fiber composite material (FCM). The method is based on regularly reinforced FCM use, where geometry and stress state are fully determined by the microstructure of the fundamental cell. Having used the offered method, the author presents the results of calculation for fiberglass with a hexagonal lattice.

Keywords: composite material, strength, residual stress, periodic structures.

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