

THE DETERMINATION OF THE EFFICIENT PARAMETERS OF SURFACE STRENGTHENING THE THIN-WALLED AND THE SMALL-HARD PARTS OF GAS TURBINE ENGINES BASED ON DEFORMATION TOLERANCE

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The energetic method for determination of the efficient parameters of strengthening has been developed on the basis of the analysis of the residual stress of parts as well as on the initial stress conception. This method provides the increase of the endurance strength and the relationship of parts within the limits of technological tolerance. The realization of the method is described on the example of shot peening strengthening.

Surface strengthening, residual and initial stresses, technological residual deformations, the energy surface layer, parameters of strengthening, nomogram

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