Calculation of the shell temperature under external dynamic pressure

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Method of estimating random parts of deformed cylindrical and spherical shells under implosive pressure is investigated. Physical and mechanical characteristics of shells' material are given according to the model of rigid – plastic body. Notion of deforming temperature is introduced as a main factor in temperature formulae of shells' parts. The other formulae's factors are functions of dimensionless parameters related to geometrical dimensions of the shells. Appeared from the produced formulae the substantial temperature increase of the parts of inner surface can be observed in shells' collapse.

Keywords: *intensive deformation, ideal plasticity, temperature, symmetric shell, implosion.*

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