

---

# Modeling bundles splits in multi-structural elements under impact loading

© T.A. Butina, V.M. Dubrovin

Bauman Moscow State Technical University, Moscow, 105005, Russia

*A method for calculating the stress-strain state in the multilayer structure elements (cylindrical, spherical shells, plates) with pulsed heat and power loading, which allows to take into bundle, the destruction, the presence of initial clearances. An example of calculation.account the elastic-plastic flow of the medium, changing the temperature field, the ability.*

**Keywords:** *strain-stress state, multilayer elements of constructions, mechanical momentum, temperature field, spalls, layer separations, stresses.*

**Butina T.A.** (b. 1950) graduated from the Faculty of Management and Applied Mathematics of the Moscow Institute of Physics and Technology in 1974. Ph.D., Assoc. Professor of the Computational Mathematics and Mathematical Physics Department of Bauman Moscow State Technical University. A specialist in the field of strength and stability of deformable systems. e-mail: butina\_ta@mail.ru

**Dubrovin V.M.** (b. 1935) graduated from the Faculty of Mathematics and Mechanics Saratov State University in 1958. Ph.D., Assoc. Professor of the Computational Mathematics and Mathematical Physics and of the Higher Mathematics Departments of Bauman Moscow State Technical University. Specialist in the field of strength, stability of deformable systems. Research interests: dynamics of strength and stability of deformable systems; creep of structural materials. e-mail: vmdubrovin@mail.ru

---