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High-speed behavior of some shape memory alloys BRAGOV ANATOLY, Head of Laboratory, D.Sc., LOMUNOV ANDREY, Senior Researcher, PhD — In the message the results of dynamic tests of materials with shape memory effect are submitted. The high-speed tests at tension and compression of alloys TiNi and CuTiAl were executed by using the Kolsky technique with the split Hopkinson pressure bar. As a result the dynamic deformation diagrams were obtained. On some of them the phase transitions from austenite into martensite and back are observed obviously. Within the framework of the Kolsky method its updating is offered allowing at return transition, caused by a plastic deformation, at the expense of sample heating to study kinetics of phase transition: i.e. to estimate time of transition, its energy. The complex character of high-speed deformation of the investigated materials is marked.

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