

Abstract Submitted  
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**Influence of High-Velocity Shock Loading on Metals** SVETLANA ATROSHENKO, Institute for Problems of Mechanical Engineering, NATALJA NAUMOVA, STANISLAV NOVIKOV, VNIIEF — The work is devoted to investigation of metals under shock loading. Testing was realized under uniaxial shock loading and spherical action of waves. The materials under investigations were copper, aluminum, lead, titanium, titanium alloys VT5 and VT6, aluminum alloy AMg2 and different steels - 45 carbon steel, Cr-4Ni-Mo steel, austenitic stainless steel 18Cr-10Ni-Ti. Microstructure investigations carried out using optical microscopy, microhardness device and X-ray analysis [1]. It was determined widening of interference lines as indicator of second type stress level. The comparison of two types of dynamic loading was carried out.

Svetlana Atroshenko  
Institute for Problems of Mechanical Engineering

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