Localization of martensite near spall surface when shock-wave loading of stainless steel

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IGOR SVYATOV, YURIY ZOUEV, Russian Federal Nuclear Center - Zababakhin Institute of Technical Physics, Snezhinsk, Russia — Results of x-ray investigation of distribution of deformation martensite in samples of stainless steel 12X18H10T, which undergone spall fracture under shock-wave loading are presented in this paper. Localization of deformation martensite near the spall surface was found. An estimation of layer thickness where localization takes place was done.