Study of compressibility of materials used in 3-D printing using synchrotron radiation

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The paper presents the results of a study of the shock wave compressibility Acrylonitrile Butadiene Styrene (ABS), fluoroplasti and photopolymer resin Formalabs "ClearResin". Compression of samples was carried out by a charge of plastic explosive. The process of compression was recorded using radiography by synchrotron radiation. The study was conducted for validation purposes of EOS of materials used in 3D printing.