

Effect of hot and cold severe deformation by extrusion on the properties of lead and aluminum alloys

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Abstract

© 2015, Pleiades Publishing, Ltd. The study of the effect of severe plastic deformation (SPD) by extrusion shows that the ductility of lead after several cycles of SPD increases significantly (3-4 times) as compared to as-cast samples. An aluminum alloy after this processing is hardened by a factor of 2.3-2.5, with ductility decreasing by 2.5-2.7 times, as compared to the as-delivered state.

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