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

Ganiev M., Shibakov V., Pankratov D., Shibakov R.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

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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