

Surface modification of additively manufactured parts by drag finishing

Boris Pätoprstý, Ladislav Morovič, Ivan Buranský, Maroš Dubnička, and Marek Vozár

*Slovak University of Technology in Bratislava, Faculty of Materials Science and Technology
in Trnava, Ulica Jána Bottu č. 2781/25, 917 24 Trnava, Slovakia*

The production of parts by additive manufacturing is a quickly progressing area. The issue with additively manufactured parts is surface treatment with conventional methods. One of the possibilities is the treatment of the surface by drag finishing, when it is possible to modify even the complicated shapes of the parts. The article deals with the modification of additively produced parts by drag finishing. The goal was to find out to what extent is it possible to modify the integrity of the surface of parts produced by additive manufacturing. Simple cylindrical parts were produced by Fused Deposition Modelling technology. The parts were made of ABS plastic with different layer thickness. Surface roughness changes over time were monitored. As a drag finishing machine, a device developed at Faculty of Material Science and Technology was used. Two drag finishing media were used for part processing - Al_2O_3 and SiC + walnut shells. It was determined that the roughness of the surface of additively manufactured parts can be significantly improved.

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