The Study of Defects on Galvanically Plated Polymeric Parts

Zuzana Andrsova¹, Petr Podzimek², Pavel Kejzlar¹
¹Institute for nanomaterials, advanced technologies and innovations, Technical university of Liberec, Studentska 1402/2, Liberec 1, 461 17. Email: zuzana.andrsova1@tul.cz, pavel.kejzlar@tul.cz.
²Funchem, Snehurcina 712/77, Liberec 15, 460 15. Email: podzimek@funchem.cz.

Galvanic plating of polymeric structural parts is widely used in many industrial branches, e.g. in automotive. Minor errors in their manufacturing process are responsible for presence of surface defects. These defects, especially in the case of visual and decorative parts, are unacceptable. This paper demonstrates the usage of optical and electron microscopy to reveal and solve common problems in industrial production. Different types of galvanic plating defects on injection molded parts made of ABS, PC/ABS and PA manifest themselves by different ways.

Keywords: Microscopy, Coating, Analysis, Defect, Polymer

Acknowledgement

The results of this project LO1201 were obtained with through the financial support of the Ministry of Education, Youth and Sports in the framework of the targeted support of the “National Programme for Sustainability I” and the OPR&D1 project Centre for Nanomaterials, Advanced Technologies and Innovation CZ.1.05/2.1.00/01.0005.

References