Setting of Angle of Soil Flow on Ploughshare at Traditional Processing of Soil

Stanislav Petrásek, Miroslav Müller
Faculty of Engineering, Czech University of Life Sciences Prague. Czech Republic. E-mail: petrasek@tf.czu.cz.

The soil is a considerable abrasive medium which exerts on tools processing the soil in a negative way. The main problem connected with using the soil processing machines is their wear owing to particles embedded in the soil. The ploughshare is one of the most loaded parts of the ploughing body and huge requirements are put on it. The aim of the research is to set an angle of a soil flow and connected wear of the ploughshare at the traditional processing of the soil. It is possible to further issue from ascertained pieces of knowledge at a production/renovation of the ploughshares with new functional surface. The statistical analysis evidenced that the angle of the soil flow on the ploughshare surface was the same with the angle of the ploughshare head. It followed from the measurements that the optimum angle for depositing the oblique overlay which is necessary for the creation of the serrated edge is in the interval 35 ± 4°.

Keywords: Composite, Functional surface, Optical analysis, Steel, Wear

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