DEVELOPMENT OF LASER MOBILE SCANNERS WITH THE SYSTEM OF RECOGNITION IN DETERMINATION OF GEOSPATIAL POSITION OF RAILWAY

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The article describes the device of the Scanput-M mobile laser scanner (MLS), developed by the author. The scanner is different from its analogues because it has reflective marks, which provide automated determination of the points of rail threads in the cloud, a description of the software and functionality. The advantages of portable mobile laser scanners equipped with reflective marks, when processing data, are shown. The results of the accuracy assessment obtained on the experimental section of the railway track are presented, an example of constructing a transverse profile according to laser scanning data and comparing data with design values is shown.

Key words: mobile laser scanner, calibration procedure, reflective marks, engineering and geodetic works, railway infrastructure, reference experimental section of the railway.

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