

IMPROVEMENT OF ALIGNMENT MEASUREMENT PROGRAMS BY COORDINATE METHOD

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The article is devoted to the improvement of alignment measurements performance with the help of the coordinate method and using total stations. Depending on the type of engineering construction the implements bion of the coordinate method can be carried out with the application of different observation programs. The article considers different programs and schemes of misalignment determination of deformation marks, positioned on buildings. In the result of carried out survey it is stated that with the application of high-accuracy total stations the mean square error of misalignment determination is equal to 0,5–2,0 mm depending on the quantity of measurement ways, alignment length and the impact of outside conditions. Besides, the application of coordinate method allows controlling the obtained results during the process of measurement performance on the object. The article makes the conclusion that the coordinate method is more efficient than the method of travelling mark or the method of small angles.

Key words: total station, methods for alignment measurement, program of overall alignment, parts of alignment, consequent alignments, measurement schemes, alignment points, mean square error of measurements.

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