

## IMPROVEMENT OF THE METHOD OF FAN-SHAPED TRIGONOMETRIC LEVELING

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The article deals with the method of fan-shaped engineering and geodetic leveling carried out with the trigonometric method. The essence of this technique is to lay a leveling stroke in a trigonometric way with simultaneous leveling of several points at the station. The proposed method of engineering and geodetic leveling can be applied to determine the height position of buildings, installing embedded parts, verifying technological equipment, monitoring deformation processes, as well as ensuring the installation and operation of crane tracks of overhead cranes. The implementation of this technique allows determining the altitude position of points located on different horizons. The advantage of the proposed method is the possibility to carry out leveling with a significant inequality of the shoulders, as well as the possibility of choosing a leveling station with minimal influence of disturbing factors.

**Keywords:** trigonometric leveling, total station, leveling station, leveling stroke, profile lines, shoulder difference, measurement error

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