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### Monitoring a Torsion Beam Test using Photogrammetric Techniques (Conference Paper)

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#### Abstract

A new application based on photogrammetry to measure displacements in three dimensions is shown in this paper. Results of displacements for a torsion test of a 3m long beam and 0.50 x 0.50m in cross section under laboratory conditions is presented and a comparison with traditional measurements by potentiometers is presented to check the validity of the photogrammetric method. The three-dimensional photogrammetric method demonstrates good accuracy and allows for a continuous measurement of a three-dimensional body. The technique presented can be used to monitor displacement with good accuracy. © Civil-Comp Press, 2015.

#### Author keywords

Concrete; Photogrammetry; Testing; Torsion

#### Indexed keywords

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Keywords: photogrammetry, testing, torsion, concrete.

#### Summary

A new application based on photogrammetry to measure displacements in three dimensions is shown in this paper. Results of displacements for a torsion test of a 3m long beam and 0.50 x 0.50m in cross section under laboratory conditions is presented and a comparison with traditional measurements by potentiometers is presented to check the validity of the photogrammetric method. The three-dimensional photogrammetric method demonstrates good accuracy and allows for a continuous measurement of a three-dimensional body. The technique presented can be used to monitor displacement with good accuracy.  
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