

Abstract

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Development of a computer vision system for metrological applications

The computer vision systems applications are widely spreading in modern industries especially in metrology. This is because these systems are flexible, non-contact and less restricted by the workpiece geometric configuration. The present work introduces a computer vision system, which is able to recognize different shapes and extract their dimensions. Two calibration methods for system are investigated and evaluated. For more generalization, the system calibration methods consider the height of the camera from the workpiece. Finally, the system is tested and assessed by using real workpieces.