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# ALGORITHMIC COMPENSATION OF VIDEO IMAGE DYNAMIC ERRORS WITH MEASUREMENT DATA ABOUT GEOMETRIC AND OBJECT MOTION PARAMETERS

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**Abstract:** *This article considers the mathematical models and methods of identifying the video image dynamic errors. These movies contain information on measuring the geometric parameters and motion parameters of natural stone products and equipment used in their manufacture. The details of dynamic errors are required to develop the algorithmic procedures of their compensation and to improve the accuracy of measuring these geometrical and motion parameters of the measurement object.*

**Keywords:** *geometrical parameters, motion parameters, video images, dynamic errors, industrial products made of natural stone*

## 1. Introduction

A modern and effective method of measuring the geometric parameters of the products is the formation of their digital video images followed by their algorithmic processing by digital computers, which is a part of the automated systems at production site. The video image contains information on measuring the geometric parameters of products and motion parameters of equipment used for their manufacture. For example, these can be the video images of products made of natural stone [1-5]. The results of these measurements should be used for quality control of products from natural stone, including the monitoring of

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