

Improving optical pipeline through better alignment and calibration process

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Introduction

Dimensional metrology and alignment methods are significant and vital during different manufacturing processes. Dimension inspection processes play a crucial role in controlling the position accuracy of production [1]. P Maresca et al identified the trends in metrology associated with quality control at the industrial level: fast, more precise and more flexible [2]. The highly automated measuring and control systems demanded by the industries could use several approaches to extract more values from traceable measurements [3]. An industrial metrology process is used on industrial systems, components and objects to perform inspections, alignment and measurement [4]. It offers economic argument regarding the effects of intrinsic standard technology advances and considers the measurement information infrastructure's potential impact on cost effectiveness and risks for IoT measuring instruments adoption [5]. Metrological systems are based upon the principle of good alignment system. The inspection and alignment of large scale components with a strict precision were concerned in the high-tech and heavy industry [1]. Good alignment inspection is one of the most important methods to ensure safe management.

References

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