Economic benefits of metrology in manufacturing - DTU Orbit (09/11/2017)

Economic benefits of metrology in manufacturing

In streamlined manufacturing systems, the added value of inspection activities is often questioned, and metrology in particular is sometimes considered only as an avoidable expense. Documented quantification of economic benefits of metrology is generally not available. This work presents concrete examples from industrial production, in which the added value of metrology in manufacturing is discussed and quantified. Case studies include: general manufacturing, forging, machining, and related metrology. The focus of the paper is on the improved effectiveness of metrology when used at product and process design stages, as well as on the improved accuracy and efficiency of manufacturing through better measuring equipment and process chains with integrated metrology for process control.

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