### Accepted Manuscript

# A CASE STUDY IN TECHNOLOGICAL QUALITY ASSURANCE OF A METRIC SCREW THREAD

Anna Zawada-Tomkiewicz, Izabela Wierucka

 PII:
 S0263-2241(17)30586-9

 DOI:
 http://dx.doi.org/10.1016/j.measurement.2017.09.021

 Reference:
 MEASUR 4971

To appear in: Measurement

Received Date:	31 July 2017
Revised Date:	11 September 2017
Accepted Date:	12 September 2017



Please cite this article as: A. Zawada-Tomkiewicz, I. Wierucka, A CASE STUDY IN TECHNOLOGICAL QUALITY ASSURANCE OF A METRIC SCREW THREAD, *Measurement* (2017), doi: http://dx.doi.org/10.1016/j.measurement.2017.09.021

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

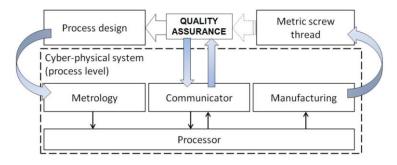
### A CASE STUDY IN TECHNOLOGICAL QUALITY ASSURANCE OF A METRIC SCREW THREAD

Anna ZAWADA-TOMKIEWICZ<sup>1</sup>, Izabela WIERUCKA<sup>2</sup> <sup>1</sup> anna.zawada-tomkiewicz@tu.koszalin.pl, Koszalin University of Technology, 75-620 Koszalin, 15-17 Raclawicka Str., Poland <sup>2</sup> izabela.wierucka@tu.koszalin.pl, Koszalin University of Technology, 75-620 Koszalin, 15-17 Raclawicka Str., Poland

#### Abstract

This paper presents a set of actions taken within the quality system in order to ensure that a product fulfils quality requirements. The quality of the product was guaranteed by application of the concept of cyber physical system using the three quality management stages strategy proposed by Taguchi. Technological quality assurance of a product was proposed on the example on a metric screw thread. The paper is divided into three parts. Firstly, the specifications of a product, technology and measurement system are introduced, then the capability of the system is tested, and finally the controllable and uncontrollable factors influence on the system are contemplated with regard to providing the product with technological quality.

Graphical abstract



Keywords: cyber physical system, metric screw thread, quality assurance, dimensional and form accuracy, blade wear, MSA analysis

Download English Version:

## https://daneshyari.com/en/article/5006317

Download Persian Version:

https://daneshyari.com/article/5006317

Daneshyari.com