
ABSTRACTS

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**Proposal for automation and its digitization for the selected
manufacturing company**

(pages 23-26)

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Keywords: automation, digitization, material flow.

Abstract: This article examines a selected manufacturing company, where an analysis of the current production layout was conducted. The primary objective of this study was to propose an automation solution to enhance the efficiency of the production process. The proposed automation system incorporates handling robots and roller conveyors to streamline material transportation from the warehouse to the production area. The implementation of this system aims to eliminate production downtime and ensure a continuous and efficient workflow. Article outlines the purpose of automation implementation, along with the necessary investment requirements. Additionally, the study provides a comprehensive evaluation of the proposed solution, highlighting both the advantages and potential challenges of automation.

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Estimation of cumulative distribution for noncentral distributions

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Keywords: noncentral, cumulative distribution function, hypothesis testing, Type II error, Power of t-test.

Abstract: Noncentral distributions are probability distributions that are used to model a random variable where a noncentrality parameter determines the location of this distribution. These distributions are used in statistics, especially in hypothesis testing to compute the power of a test. The manuscript aims to compute cumulative distribution for noncentral t distribution using built-in functions in Microsoft Excel. The results obtained were found to be comparable to reported values.
