ASIGURAREA CALITĂȚII – QUALITY ASSURANCE

Octombrie - Decembrie 2014 Anul XX Numărul 80

Detection of Mean Shifts by Statistical Approaches Part 1: Context of Univariate Independent Normally Distributed Observations

Teodor TIPLICA*

UNAM Université, Laboratoire Angevin de Recherche en Ingénierie de Systèmes (LARIS), EA 7315, France

Abstract

This article is intended to be a first part of a global overview of the research on the detection of mean shifts through statistical techniques. The paper provides a description of the main developments over time in the field of statistical process control and more particularly in the construction of control charts. Various categories of univariate control charts that have emerged in research are reviewed in the particular context represented by independent observations and distributed under the normal distribution.

Keywords: SPC, Control charts, step shift, ramp, detection, independent observations, normal distribution.

^{*} Correspondence to Dr. Teodor Tiplica, e-mail: teodor.tiplica@univ-angers.fr.