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Statistical Multivariate Process Control based on FNAD Methodology

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Abstract
In this paper several aspects concerning the use of the FNAD (Filtrage Numérique et Analyse Discriminante) methodology in the statistical multivariate process control are presented. The main aspects of the Discriminated Analyze and general notions of Numerical Filtering of signals are described. The necessity of data filtering and the way the type and the parameters of the used numerical filter were chosen are described, too. As an application, the influence of the filtering of three non-correlated or correlated variables in the process of discrimination, are presented. The advantages of this new methodology are finally analyzed.

Keywords: Quality, Quality control, Statistical Multivariate Process Control, Discriminated Analyze, Numerical Filtering, FNAD method.

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