



Statistical Process Control Charts: Bibliometric Analysis of Publications in Brazil

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This paper contains a bibliometric analysis of articles related to control charts in Brazil. The choice of this theme is relevant because the search for improving the quality of products, services and processes has been steady. To study the national scene in Brazil, the basis of the research was the Scientific Electronic Library Online (SciELO) and other important journals in the area of engineering. This database was chosen because it provides literature written in Portuguese and Spanish, in addition to well-defined entry standards and criteria and permanence of scientific journals. The period set for the evaluation was from 2001 to 2014. During this period, the publications in the multivariate control chart area are limited to the period after 2005, which indicates that this area of study is still little explored in the country. The articles were also analyzed for their application. They were divided into four groups: Agribusiness: publications that used data for fields, crops or technologies used in rural areas; Study: articles related to theoretical analysis, proofs, interpretations and use of the proposed control charts; Industry: those that used data collected from industrial processes and case studies; Other: any scientific publication related to the subject that does not fit in the previous three areas. Through this breakdown, one can see that agribusiness is developing in the area of univariate control charts in similar proportion to industry. On the other hand, multivariate control charts are more prevalent in the area of theoretical study, which shows an area of development in this segment.

Keywords: Multivariate charts; Bibliometric analysis; Statistical Process Control.