

ANALYSIS OF MANUFACTURING DATA USING QUALITY ANALYSIS PLATFORM

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ABSTRACT

We have developed analytical tools that include various modules based on statistics and machine learning for quality analysis through many national project. Typically, there are two analysis tools, one is Q-Factory and the other is IIoS Platform. The Q Factory platform contains a total of 39 analysis modules, each of which is divided into four categories: basic quality improvement tools, statistical analysis tools, statistical process control, and data mining-based quality management tools. The IIoS platform includes about 15 analysis modules and is developed with clustering, classification and prediction algorithms. In this study, we introduce the characteristics and detailed modules of two quality analysis platforms and present cases of quality analysis using manufacturing data.

Keywords: Q-Factory, IIoS Platform, Statistics, Machine learning, Quality management.