

Quantifying suppliers' product quality: an exploratory product audit method

ABSTRACT

The quality of the raw material and supplied product from suppliers plays a critical role in the quality of the final product. It has become the norm that vehicle manufacturers require their suppliers to measure product quality and service with a product audit method. Measuring quality of product is emphasised by QS9000 VDA6.5 and ISO/TS16949. From a competitive standpoint, and also to see continuous improvement in business, companies need to monitor their suppliers performance. Quality and delivery are two very important indicators of supplier performance. This paper presents a statistical method for measuring the quality of supplied product. This method allocates different weights to variables and attributes characteristics. Moreover, following normal distribution, the tolerance zone is divided to three regions with different scores. Therefore, the quality of suppliers products can be monitored based on the Product Quality Audit Score (PQAS). However, this method may be employed for organisations to monitor their raw material, work-in-process parts, and final product. It can be an indicator to monitor supplier quality behaviour.

Keyword: Quality of the raw material; Supplied products; QS9000 VDA6.5; ISO/TS16949; Monitoring supplier performance; Product Quality Audit Score