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## Abstract

In the work machine sector reliability stands for trouble-free functioning of a machine. Dependability is an important factor of competitiveness both to the operators and to the work machine manufacturers.

According to the IEC-standards dependability consists of three factors: reliability performance, maintainability performance and maintainability support performance. Reliability performance describes the ability of a machine to perform a required function for a period of time without failures and without maintenance. Maintainability performance describes how easy a machine is to maintain. Maintainability support performance is not a product feature; it describes the ability of support organisation to keep the machine running.

Dependability management system is designed to manage all the factors of dependability during the life cycle of a product. It is closely related to Quality Management. With the help of dependability management system it is possible to effectively utilise experiences achieved from previous machine models and simultaneously design a new product to be dependable.

Recently the machine manufacturers have expanded their traditional business to maintenance and service. In some cases the manufacturer is responsible for both the machine performance and the maintenance support system. At the same time a customer can require that the machine operates on a certain availability performance level. If an agreement is made over this topic the agreement is called as availability guarantee contract. Due to this development of the business opportunities the manufacturers must know the performance of their machines more precisely than before to avoid unprofitable commitments. In addition the manufacturer have to be able to demonstrate that the service contract is cost-effective to the customer.

Dependability management system should not be a separate system. It should be a part of the usual way the manufacturer operates on its special field of know-how.