보전성 경영 프로그램 개발을 위한 지침 Guide-line for Developing a Maintainability Program

이낙영(충남대학교), 김종걸(성균관대학교), 권영일(청주대학교), 홍연웅(동양대학교), 전영록(경남대학교), 나명환(조선대학교)

Abstracts

Maintainability refers to the ease with which maintenance work can be done. It involves the process of ensuring that products can be easily and safely maintained and that the maintenance support requirement is minimized. When a product has a reasonably long life, the cost of operation and support during that life can greatly exceed the initial capital cost. The value to the customer of optimizing maintainability should be evident. Some effort and expense applied to achieving a product which can be easily and cheaply maintained will make very significant savings in the life cycle costs.

In this paper, the International Standard IEC 60300-3-10, which is the application guide for maintainability, is considered. This standard can be used to implement a maintainability program covering the initiation, development and in-service phases of a product. It provides guidance on how the maintenance aspects of the tasks should be considered in order to achieve optimum maintainability.

The elements of a maintainability program, which are maintenance policy and concept, maintainability studies, project management, design for maintainability, analysis and prediction methods, maintenance verification and validation, analysis of life cycle cost, maintenance support planning, and collection and analysis of maintenance data, are fully discussed in this paper.