조립용이성 향상을 위한 볼트 형상 설계 전문가시스템 개발 The Bolt Feature Design Expert System for Assemblability

목 학수*, 김 경윤**, 박 주형*

*부산대학교 산업공학과 **대우정보시스템

ABSTRACT

The assemblability was determined by the structure of product and the relationship between composing parts and machining parts. In this paper, the bolt was divided into blot-head, -shaft, -thread and -end. For the better assemblability in bolting process, the geometric and technological characteristics of bolts in terms of pre- and in-assembly process were analyzed. And this paper presents the development of a knowledge-based expert system which assists designer for more convenient assembly. The bolt feature design expert system for assemblability which is named as BDFA System consists of two system such as "Bolt Feature Design System" which provides a improved bolt feature design and "Evaluation System" which provides assemblability evaluation for bolt feature design alternatives to product designer.