

# KNOWLEDGE REPRESENTATION DATABASE FOR THE DEVELOPMENT OF TOLERANCES AND FITS IN DESIGN

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**Abstract:** *This paper describes the architecture of TFDES (Tolerances and Fits in Design Expert System), an expert system for fit choosing in a CAD (Computer Aided Design) environment and presents how recent improvements in the openness and functionality of tolerances and fits in design system have made a major contribution for a notable expert system. A logical algorithm is developed on computer software with user-friendly interface. The algorithm generates an optimum layout considering factors such as the relevant ISO tolerance and fits on surface-finish information in the decision process. The computer generated solutions compare extremely favourably with laborious trial and error industrial practices.*

**Key words:** *tolerance, fit, expert system, CAD design*



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