

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

ROMANESCU, M. C.; PRUNA, L.; ANTONESCU, I. & ANGHEL, A.

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*



Authors' data: Lecturer, Ph.D. **Romanescu**, M[aria] C[amelia]; Assoc. Prof. Ph.D. **Pruna**, L[iviu]; Dr. **Antonescu**, I[on]; Lecturer, Ph.D. **Anghel**, A[lina], "Gheorghe Asachi" Technical University, D.Mangeron 67, 700050, Iasi, Romania, rcameliamaria@yahoo.com, lpruna2004@yahoo.com, ianton@rubio.tuiasi.ro, a.a.anghel@gmail.com

This Publication has to be referred as: Romanescu, M[aria] C[amelia]; Pruna L[iviu]; Antonescu, I[on] & Anghel, A[lina] (2009). Knowledge Representation Database for the Development of Tolerances and Fits in Design, Chapter 92 in DAAAM International Scientific Book 2009, pp. 939-950, B. Katalinic (Ed.), Published by DAAAM International, ISBN 978-3-901509-69-8, ISSN 1726-9687, Vienna, Austria

DOI: 10.2507/daaam.scibook.2009.92