

CONTENTS

Beyond CAD/CAM	
<i>C. G. Romero</i>	1
Engineering Master Database: Productivity Tool for the Space Station Program	
<i>L. G. Weed</i>	7
Experiences With Relational and Object Oriented DBMS'S for CAD/CAM Data	
<i>P. T. Whelan and R. E. Fulton</i>	13
Conceptual Database Design for Engineering Modeling	
<i>K. H. Law</i>	19
A Finite Element Model and Finite Element Analysis Results Relational Database Management System	
<i>C. S. Collier and W. J. Rasdorf</i>	27
The Architecture of an Integrated CAD/CAM System for the Design and Manufacturing of Custom Orthopedic Footwear	
<i>W. J. Rasdorf, S. Lakmazaheri, L. K. Boose, and R. J. Wallace</i>	35
Developing a Connector Selection DBMS Using NIAM	
<i>N. E. Sevier</i>	43
Fundamental Concepts of Product Definition Analysis	
<i>M. A. Yinger</i>	55
IGES — Today's Product Data Exchange Technology	
<i>C. H. Panzica</i>	61
Challenges in Product Definition Management	
<i>S. R. Trost</i>	67
Engineering Data Management System	
<i>J. W. Gerdeen</i>	73
Commercial Product Data Management Systems: A Survey of Needs and Systems	
<i>R. H. Johnson</i>	79
Integration and Manufacturing	
<i>D. Judson</i>	85
Constraint and Exception Handling for Design, Reliability and Maintainability	
<i>A. P. Buchmann and U. Dayal</i>	95
Expectations of Knowledge-Based Support for Mechanical Engineers	
<i>J. Carlis and P. Starr</i>	101
Application of Expert System to Select Data Sources From Chemical Information Databases	
<i>E. N. Fong and C. E. Dabrowski</i>	107
The Database Component of a Hybrid CAD System for Industrial Fabrics Design	
<i>W. J. Rasdorf, P. H. Dastoor, S. K. Batra, and S. P. Hersh</i>	119