

Books

CIFAC '92: FIRST INTERNATIONAL SYMPOSIUM ON COMPUTERS IN FURNITURE AND CABINET MANUFACTURING. R. Szymani, Editor. Proceedings of the 1992 Symposium on Computers in Furniture and Cabinet Manufacturing. Wood Machining Institute, Berkeley, CA. 197 pp. U.S. \$129.00.

The First International Symposium on Computers in Furniture and Cabinet Manufacturing was sponsored by the Wood Machining Institute in cooperation with Furniture Design and Manufacturing Magazine. The symposium was designed to "provide an international forum for the exchange of the latest information on the use of computers in furniture and cabinet manufacturing between researchers and the industry" and "to help woodworking manufacturers pursue that transition from stand-alone computer systems and islands of automation to full computerization." The expertise of the speakers who participated in this meeting is extensive.

The introductory section, "Computers in Furniture and Cabinet Manufacturing: The Future Is Now," would have benefitted from an overview article that incorporated some definitions of the various computer-aided systems used in industry and addressed the degree of adoption of the various systems in North America and globally. The discussion of the impact of computer adoption on the training needs of the work force (Birkeland) was an important topic included in this section. An article which reviewed several available CAD tools (Eckelman) was well-suited to this conference but misplaced in this introductory section.

The second part of the proceedings, "Optimization of Rough-Mill Operations," is heavily oriented toward a discussion of various scanning technologies which are being developed. Once again, in this section, an overview article

prepared by a consultant/industry specialist that touched on the full range of uses of computers in the rough mill would have enhanced the presentation.

The third and fourth sections of the proceedings, "Advances in Computer Aided Manufacturing," and "Computer Integrated Manufacturing," contain articles on computer-based systems that are being widely considered for adoption by many secondary manufacturers today. Two articles which I found especially well-suited to this conference were "Flow Simulation for Diagnostics and Process Planning in Furniture Finishing Departments" by Delamare and Ciccotelli, and "CIM and Its Application to Upholstered Furniture" by Saibel. Both of these articles used detailed industry examples to effectively illustrate the implementation opportunities.

Several of the articles could have been made more effective had they been submitted to a rigorous editorial review to improve their wording and flow of ideas. Editing could have been used to better shape some of the material to fit the mission of this conference (e.g., a couple of very interesting articles made little mention of related computer technologies). On a more basic level there were cases of figure number mismatches, acronyms and abbreviations being used without prior definition, inconsistency with regard to the placement of figures from one author to the next, and in one case a table that was not translated into English.

Many wood industry consultants, researchers, and machinery suppliers should find the CIFAC Proceedings to be a worthwhile purchase for bringing them up-to-date on the computer technologies that are now available or will be available in the future. While a couple of this articles in the Proceedings contain applied information that could be useful to a wide cross-section of the secondary hardwood manufacturing industry, this is not a "how to"

manual for industry. Manufacturing engineers at some of the most technologically innovative companies may find the Proceedings valuable.

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