TEXTBOOK OF PRODUCT ENGINEERING AND STRENGTH DESIGN OF FURNITURE

Carl A. Eckelman

Professor of Wood Science
Purdue University

West Lafayette, Indiana.

January 15, 2003

Preface to the book, "Strength Design Of Furniture," published in 1978 by Carl A. Eckelman, Professor of Wood Science, Purdue University, West Lafayette, Indiana.

Preface

Although furniture designers have always been concerned with the strength of the furniture they create, a methodology has never developed which permits a designer to analyze the strength requirements of a specific piece of furniture and then calculate on a scientific basis the size of the members and the joints needed to satisfy these requirements. Several years ago, the author became interested in problems related to the strength of furniture and undertook research to obtain quantitative answers to a number of perplexing strength problems. Additional investigations followed which over a period of years have developed into a continuous program of furniture research. The collection of data and information which followed resulted in the need to transmit this knowledge to others. Short courses were held for industry personnel and a formal university class was developed and taught to present what had been learned in a systematic manner. The formalized set of class notes developed formed the basis for this book. In general, the intent of this book is to introduce and develop the concepts and principles of strength design as applied to furniture and to collect pertinent information concerning the subject into a single document. No book of this nature can ever be complete, however, since research constantly produces new knowledge which should be included with the old. Nevertheless, a start must be made at some point, and this book should be recognized for what it is, a first attempt to organize and present a rational methodology for the strength design of furniture.

Preface to the book, "Strength Design Of Furniture," published in 1978 by Carl A. Eckelman, Professor of Wood Science, Purdue University, West Lafayette, Indiana.

Preface

Although furniture designers have always been concerned with the strength of the furniture they create, a methodology has never developed which permits a designer to analyze the strength requirements of a specific piece of furniture and then calculate on a scientific basis the size of the members and the joints needed to satisfy these requirements. Several years ago, the author became interested in problems related to the strength of furniture and undertook research to obtain quantitative answers to a number of perplexing strength problems. Additional investigations followed which over a period of years have developed into a continuous program of furniture research. The collection of data and information which followed resulted in the need to transmit this knowledge to others. Short courses were held for industry personnel and a formal university class was developed and taught to present what had been learned in a systematic manner. The formalized set of class notes developed formed the basis for this book. In general, the intent of this book is to introduce and develop the concepts and principles of strength design as applied to furniture and to collect pertinent information concerning the subject into a single document. No book of this nature can ever be complete, however, since research constantly produces new knowledge which should be included with the old. Nevertheless, a start must be made at some point, and this book should be recognized for what it is, a first attempt to organize and present a rational methodology for the strength design of furniture.

Aerospace Engineering. Strength Of Materials. Ayurveda Books. Web Design Quotes.Â About This ItemWe aim to show you accurate product information. Manufacturers, suppliers and others provide what you see here, and we have not verified it. See our disclaimer "Updated, modernized, digitized, and streamlined edition of this classic handbook which has been educating plant and facility professionals in every aspect of maintenance engineering for more than half a century"-- Publisher's Note: Products purchased from Third Party sellers are not guaranteedâ€¦ Are you studying engineering? Then you have come to the right place! Our free eBooks in this category will help you prepare for your exams thanks to sub-categories in electrical, mechanical, civil or environmental engineering. What are you waiting for?Â Welcome to Bookboon. In order to provide our services we rely on a series of essential cookies to access our features. We also use a set of 3rd party cookies that allow us to deliver a better experience. Please read our Privacy Policy page , and if you agree, please click on the button below ot enter the site. FIRST MULTICOLOUR EDITION A TEXTBOOK OF (S.I. UNITS) [A Textbook for the Students of B.E. / B.Tech., U.P.S.C. (Engg.Â This type of design needs considerable scientific training and design ability in order to modify the existing designs into a new idea by adopting a new material or different method of manufacture. In this case, though the designer starts from the existing design, but the final product may differ quite markedly from the original product. 3. New design. This type of design needs lot of research, technical ability and creative think- ing. Stuart Lawson is Subject Leader, Design Products and Associate Head, School of Design at De Montfort University, Leicester, UK. Product details. Item Weight : 2.12 pounds.Â I was looking for a more technical volume exploring the manufacture of furniture for industry/commerce. What I found was an excellent overview of styles and general topics of advantages and disadvantages of various materials - but not deep technical data.Â It highlights the strengths and weaknesses of each, along with the usual manufacturing methods, taking into account the costs and production volume they are intended to. The book also looks at other aspects of design and presents different examples of actual designs, explaining the merits the author sees on each one of them. "Designing Furniture covers every step in the design process from inspiration to construction ...Â of furniture occurred at Deir el-Medina while the design and manufacturing of these furniture form Crafting with wood pallets: projects for rustic furniture, decor, art, gifts and more. 200 PagesÂ·2015Â·85.92 MBÂ·7,110 DownloadsÂ·New! Creative designs for one-of-a-kind, upcycled projects using the world's most widely available Build Your Own Home Office Furniture (Popular Woodworking). 130 PagesÂ·2001Â·17.33 MBÂ·4,914 DownloadsÂ·New!