Synopsis

Machine Design presents the subject matter in an up-to-date and thorough manner with a strong design emphasis. This textbook emphasizes both failure theory and analysis as well as emphasizing the synthesis and design aspects of machine elements. The book points out the commonality of the analytical approaches needed to design a wide variety of elements and emphasizes the use of computer-aided engineering as an approach to the design and analysis of these classes of problems. About 100 new problems will be added throughout the book, and certain topics are updated and enhanced.

Book Information

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Customer Reviews

Norton is an awesome resource. For students going to college it may seem overwhelming. But it is the MOST up to date text on the market on the subject of Machine Design. While taking the PE exam I compared Shigley vs Norton on information, and Norton had all the answers. The author has done a monumental job in bringing the vast spectrum of Machine Design in a very well composed book. I have yet to come across a resource like Norton. In fact, I recommend this book to practicing engineers. Almost every section of the book has real world value. Its worth having on the shelf. I was always into Shigley but Norton is more in line with industry practice as opposed to academic exercises as presented by Shigley.

I am in the solid mechanics group of the Mechanical Engineering dept. at my university. I have
taught Machine Design I and II from this book (3rd and 4th ed.) for 6 semesters and I am very happy with the book. It is clear that the author has actual machine design experience. The book is easy to teach from and the students like it. Each chapter has a lot of problems in the back, some stand-alone for that chapter, others that tie in with previous chapters. Concepts are presented in a fairly straightforward manner. Derivations are given where applicable. There are numerous examples, and they are usually quite relevant to actual machine parts. Each chapter has a very long, thorough design example at the end, which incorporates the current chapter and concepts from previous chapters. I have noticed that almost all of my students keep this book after they are done with the course, and use it as a reference for their capstone design projects. The book is a tad bit pricey, but it has a lot of content, and it is very useful as a reference. I highly recommend it for instructional use and for use as a personal reference.

Excellent content, poor manufacturing on binding the pages together—I have a hardcover book. After a year of having the book, all of the pages are falling out. The absolute worst bounded book that I have ever payed over 200 bucks for. Shame on you Prentice Hall. A classmate also bought the same book, and his book is basically a loose leaf booklet already.

The book has excellent procedure and theory development and explanation. The end of the chapter problems need extreme help. The questions are redundant, unclear, and are built upon from answers of previous chapter problems, sometimes requiring answering a question from chapters 2, 4, 5, and 6 to get a final answer in a chapter 7 question. Many answers in the back of the book are incorrect, about (50%). Looks like Norton had his TA do his problems.

I am using this book for a mechanical engineering machine design course. I usually resell my books after I take the course, but this one I might keep. It seems to have a lot of useful information, and the chapters are mapped out very well. It explains concepts very well, derives several equations, and makes great use of tables and graphs. My only complaint would be on the format of some of the practice problems, which build on each other over several chapters. This is only some of the problems.

Great book; extremely useful and easy to navigate, but the binding was awful. The book was nearly about to fall apart when I first got it. I am just glad they accepted my return when I was done with it.
The problems will refer to figures in previous pages or even previous chapters. This makes doing homework a real pain. Also after using this (BRAND NEW) book for less than a month the binding had already fallen apart. Only the back cover remains attached now. Luckily agreed not to charge me for the damage as I had rented this book and would have been charged the full price of the book.

I don't have the software access that is provided with this book, but as a stand-alone resource, I've been enjoying the reading and organization of this text. It's been very plain-language and easy to sort through. I like it.

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