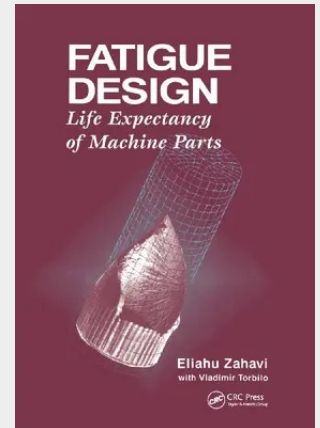


Fatigue Design

Life Expectancy of Machine Parts

Modern analytical theories of fatigue coupled with a knowledge of processing effects on metals make up the sound basis for designing machine parts that are free from unexpected failure. Fatigue Design: Life Expectancy of Machine Parts provides the information and the tools needed for optimal design. It highlights practical approaches for effectively solving fatigue problems, including minimizing the risk of hidden perils that may arise during production processes or from exposure to the environment. The material is presented with a dual approach: the excellent coverage of the theoretical aspects is accented by practical illustrations of the behavior of machine parts. The theoretical approach combines the fundamentals of solid mechanics, fatigue analysis, and crack propagation. The chapters covering fatigue theories are given special emphasis, starting with the basics and progressing to complicated multiaxial nonlinear problems. The practical approach concentrates on the effects of surface processing on fatigue life and it illustrates many faceted fatigue problems taken from case studies. The solutions demonstrate the authors' detailed analyses of failure and are intended to be used as preventive guidelines. The cases are a unique feature of the book. The numerical method used is the finite element method, and is presented with clear explanations and illustrations. Fatigue Design: Life Expectancy of Machine Parts is an extremely valuable tool for both practicing design engineers and engineering students.



99,00 €

99,00 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780367401337

Medium: Buch

ISBN: 978-0-367-40133-7

Verlag: CRC Press

Erscheinungstermin: 25.09.2019

Sprache(n): Englisch

Auflage: 1. Auflage 2019

Produktform: Kartoniert

Gewicht: 637 g

Seiten: 336

Format (B x H): 178 x 254 mm

