
Preface

This book describes the behavior of some machine elements during action, based on our understanding accumulated over many decades of machine design. We have sought to describe the mechanisms of interaction between the motion participants in as much detail and depth as the scope of our knowledge and the volume of the book allow.

Our understanding is based in many respects on the work of others, and we have made reference to all authors and publications known to us. But the literature of mechanical engineering is vast, and we welcome notification by any author inadvertently omitted to enable us to amend this omission in the future.

Chapter 1 to Chapter 11 were written mainly by Boris M. Klebanov. Chapter 12 was written mainly by David M. Barlam, who also performed all the calculations using the finite element method (FEM) that appears in the book. Chapter 13 was written jointly by Boris M. Klebanov and David M. Barlam. Frederic E. Nystrom edited the entire work, including the text, tables, and illustrations.

This work is dedicated to our teachers.

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