

BOOK REVIEWS

F. W. HEILICH, E. E. SHUBE: *Traction drives. Selection and Application.* Marcel Dekker, Inc., New York and Basel. 1983. 360 pp.

The book was written for professional mechanical engineers for the practical applications selecting power transmission equipments. It treats the drive in its proper role as a major element in a system that consists of the power source, the drive and the load.

This is the first book devoted exclusively to traction drives (drives; efficiently transferring mechanical shaft power from a source to a load by means of metal rollers running on a film of traction fluid against mating metal rollers), which presents a thorough account to facilitate selection of the proper arrangement, and allows application directly to engineering problems involving power transmission system.

The book consists of 12 chapters, containing detailed and available friction drives with nearly 200 helpful figures, sketches; tables and photographs — as well as actual case of histories and examples.

Traction drives provide sufficient information for engineers to understand simple basic relationships, principles of traction, nature of traction fluids, characteristics of power sources, characteristics of loads, method of optimizing, selection of the drive and some practical economics. This book also serves as a superior supplement in advanced undergraduate courses in mechanical, industrial or system engineering, machine design, and engineering economics.

L. VARGA

R. P. LAMBECK: *Hydraulic Pumps and Motors: Selection and Application for Hydraulic Power Control Systems.* Marcel Dekker Inc. New York 1983. 176 pp.

Hydraulic Pumps and Motors written by Raymond P. Lambeck is an ideal introduction to the selection and application of hydraulic power control systems. The book basically serves undergraduate-level students of mechanical engineering technology and engineers who are occasionally engaged with variable displacement pumps and motor controls, hydrostatic transmissions and hydraulic systems. In addition, *Hydraulic Pumps and Motors* is a fundamental book for in house training programs, continuing education courses and professional seminars.

The informations presented in the book are straightforward and very practical, requiring not too much of prior knowledge.

The readability and clear text — which is general and non mathematical — helps to build reader's confidence, too.

Hydraulic Pumps and Motors includes informations of performance capabilities and application characteristics of pumps and motors, contains useful laboratory data and design informations, product illustrations. The author gives good information about selection of the optimum combination of units and facilitates to assure maximum productivity and minimum consumption.

Making use of the book the engineering principles of system design can be understood, too.

Hydraulics is another daily growing field of interest. For this reason the book is especially up-to-date and very useful.

J. DEMÉNY