This text-book provides an in-depth background in the field of Fluid Power. It covers Design, Analysis, Operation and Maintenance. The reader will find this book useful for a clear understanding of the subject and also to assist in the selection and troubleshooting of fluid power components and systems used in manufacturing operations, providing a systematic summary of the fundamentals of hydraulic power transmission.

This book discusses the main characteristics of hydraulic drives and their most important types in a manner comprehensible even to newcomers of the subject.

This book covers a broad range of topics in the field, including: physical properties of hydraulic fluids; energy and power in hydraulic systems; frictional losses in hydraulic pipelines; hydraulic pumps, cylinders, cushioning devices, motors, valves, circuit design, conductors and fittings; hydraulic system maintenance; pneumatic air preparation and its components; and electrical controls for fluid power systems. It provides everything you need to understand the fundamental operating principles as well as the latest maintenance, repair and reconditioning techniques for industrial oil hydraulic systems.

Better understanding of the material is promoted by the sample solutions to various mathematical problems given in each chapter. A number of photographs and illustration have been attached to reflect current “Fluid Power system”.

The book in its 15 Chapters and 3 Appendices contain:

- 431 Neatly drawn self-explanatory diagrams
- 54 Useful Tables
- 52 Worked examples
- 285 Questions are given for preparation of examinations

It is hoped that this book will satisfy the need of the Mechanical Engineering students preparing for the B.Tech/B.E. examinations of almost all the Indian Universities, Diploma examinations conducted by various Boards of Technical Education, Certificate courses as well as for the A.M.I.E., U.P.S.C., G.A.T.E. and other similar competitive and professional Examinations. It should also be of an immense help to the practising Engineers.
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