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6.5 Pole-changing induction motors; 6.6 Multi-speed gearboxes; 6.7 Throttling by control valve; 6.8 By-pass return; 6.9 Infinitely variable speed; 6.10 Choice of flow regulation method; 6.11 Useful references; Chapter 7. Materials for pumps; 7.1 Introduction; 7.2 Typical materials; 7.3 Material strength and integrity; 7.4 Corrosion and erosion; 7.5 Abrasion resistant materials; 7.6 Materials resistant to cavitation damage; 7.7 Material selection; 7.8 Conclusions; 7.9 Useful references; Chapter 8. Process seals and sealing; 8.1 Introduction; 8.2 Rotary shafts; 8.3 Process liquid seals for rotary shafts; 8.4 Reciprocating rods; 8.5 Process liquid seals for reciprocating rods; 8.6 Process liquid seal selection; 8.7 Useful references; Chapter 9. Shaft couplings; 9.1 Introduction; 9.2 Types of coupling; 9.3 Misalignment; 9.4 Forces and moments; 9.5 Service factors; 9.6 Speed; 9.7 Size and weight; 9.8 Environment; 9.9 Installation and disassembly; 9.10 Service life; 9.11 Shaft alignment; 9.12 Choice of coupling; 9.13 Machinery guards; 9.14 Useful references; Chapter 10. Drivers for pumps; 10.1 Basic electrical theory and principles; 10.2 Regulations and standards; 10.3 Motor types; 10.4 Motor starters; 10.5 Noise; 10.6 Maintenance; 10.7 Engines; 10.8 Turbines; 10.9 Power recovery turbines; 10.10 Motor selection illustration; 10.11 National Standards bodies; 10.12 Useful references; Chapter 11. Ancillary equipment; 11.1 Introduction; 11.2 Mountings; 11.3 Belt drives; 11.4 Gearboxes; 11.5 Relief valves; 11.6 Non-return valves; 11.7 Accumulators; 11.8 Pulsation dampers; 11.9 Instrumentation; 11.10 Useful references; Chapter 12. Quality, inspection and testing; 12.1 Introduction; 12.2 Mass-produced pumps; 12.3 Custom-built pumps

Sommario/riassunto

Written by an experienced engineer, this book contains practical information on all aspects of pumps including classifications, materials, seals, installation, commissioning and maintenance. In addition you will find essential information on units, manufacturers and suppliers worldwide, providing a unique reference for your desk, R&D lab, maintenance shop or library.* Includes maintenance techniques, helping you get the optimal performance out of your pump and reducing maintenance costs * Will help you to understand seals, couplings and ancillary equipment, ensuring systems are set