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Altri autori (Persone)	NesbittBrian
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Nota di contenuto	Front Cover; Handbook of Pumps and Pumping; Copyright Page; Contents; Chapter 1. Pump types; 1.1 Introduction; 1.2 Checklist of pump terminology and definitions; 1.3 Rotodynamic pumps; 1.4 Special rotodynamic pumps; 1.5 Positive displacement pumps; 1.6 Other pump types; 1.7 Useful references; Chapter 2. Properties of liquids; 2.1 Explanation of terms; 2.2 Water; 2.3 Oils; 2.4 Liquid-solid mixtures; 2.5 Liquid-gas mixtures; 2.6 Table of liquid properties; 2.7 Useful references; Chapter 3. Flow of liquids; 3.1 Fundamental equations; 3.2 Pipe flow losses; 3.3 Liquid-solid mixtures 3.4 Pressure losses - nomograms and diagrams 3.5 Flow measurement; 3.6 Useful references; Chapter 4. Pump theory; 4.1 Introduction; 4.2 Rotodynamic pumps; 4.3 Positive displacement pumps; 4.4 Suction performance; 4.5 Useful references; Chapter 5. Pumps and piping systems; 5.1 System curves; 5.2 Pressure drop across valves; 5.3 Multiple pump systems; 5.4 Pump hydraulic data; 5.5 Water hammer; 5.6 Pressure pulsations; 5.7 Useful references; Chapter 6. Flow regulation and control; 6.1 Introduction; 6.2 Variable flow requirements; 6.3 Flow regulation; 6.4 On-off control of constant speed pump

6.5 Pole-changing induction motors6.6 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 shafts8.4 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 standards10.3 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

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#### 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

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