

1. Record Nr.	UNISA996394625203316
Autore	Wade John
Titolo	The faithfull woings sic of two conuntry sic lovers. The young-man he with carriage bold, did oft salute the maiden, and unto her these words he told, his heart with love was laden; and if to him her love she'd grant he'd do his best indeavour. To maintai
Pubbl/distr/stampa	England, : Printed by E.C. for F. Coles, in Vine-Street near Hatton-Garden
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9910784016103321
Autore	Bachus Larry
Titolo	Know and understand centrifugal pumps [[electronic resource] /] / by Larry Bachus and Angel Custodio
Pubbl/distr/stampa	Oxford ; New York, : Elsevier, c2003
ISBN	1-281-03546-7 9786611035464 0-08-050974-6
Descrizione fisica	1 online resource (265 p.)
Altri autori (Persone)	CustodioAngel Antonio <1947->
Disciplina	621.6/7
Soggetti	Centrifugal pumps
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover; Contents; Prologue; About the Authors; Chapter 1. Basic Pump Principles; Introduction; How do pumps work?; Pressure measurement; Atmospheric pressure (ATM); Absolute pressure (psia); Gauge pressure (psig); Vacuum; Pump head; Specific gravity; Pressure measurement; Pressures inside the pump; Chapter 2. NPSH, Net Positive Suction Head; Introduction; Definition of NPSHr (required); Definition NPSHa

(available); Chapter 3. Cavitation; Introduction; Vapor pressure; Cavitation; The effects of vapor pressure on pump performance; Cavitation: A practical discussion
 Review for preventing cavitation Cavitation review; Do something about cavitation!; Chapter 4. The Affinity Laws; Introduction; The Laws; The Affinity Laws and the impeller diameter; What's the practical application of these laws?; Chapter 5. Useful Work and Pump Efficiency; Useful work from a pump; Flow determination; Pump efficiency; Factors that affect the efficiency; Calculating pump efficiency; Chapter 6. Pump Classification; Introduction; Positive displacement pumps; Centrifugal pumps; Conceptual difference; Centrifugal volute pumps; Types of centrifugal pumps; Overhung impeller
 Impeller between the bearings Turbine pumps; Specific duty pumps; The typical ANSI pump; API (American Petroleum Institute) pumps; Vertical turbine pumps; Non-metallic pumps; Magnetic drive pumps; Canned motor pumps; Pump impellers; Turbine impellers; Conventional impellers; Suction specific speed, N_{ss} ; Open impellers; Semi open impeller; Totally enclosed impeller; Wear bands; Specific speed, N_s ; Chapter 7. Understanding Pump Curves; Pump performance curves; History; Head versus pressure; $H-Q$; Pump efficiency; The energy (BHp) curve; The pump's minimum requirements (NPSH); Special design pumps
 Family curves Chapter 8. The System Curve; The system controls the pump; The elements of the Total Dynamic Head (TDH); Determining the H_s ; Determining the H_p ; Calculating the H_f and H_v ; The dynamic system; Variable elevations; The happy zone; Dynamic pressures; Variable resistances; Short term resistance changes; Long term resistance changes; Pumps in parallel and pumps in series; Pumps in parallel; Three tips; Pumps running in series; Combined parallel and series pump operation; Chapter 9. Shaft Deflection; Introduction; Operation, design and maintenance; Signs of shaft deflection Interpreting the evidence The sweet zone; The dual volute pump; Chapter 10. Pump and Motor Alignment; Introduction; Types of misalignment; Alignment techniques; Equipment alignment sequence; Coupling alignment; Chapter 11. Bearings; Introduction; Bearing lubrication; Bearing failure; Bearing maintenance; Bearing seals; Chapter 12. Pump Shaft Packing; History; Vegetable fibers; Reciprocating action; Packing; Rotary action; Synthetic fibers; Compression packing; The lantern ring; The packing lubricant; Stages in the life of packing; Chapter 13. Mechanical Seals; Pump packing; History
 The mechanical seal

Sommario/riassunto

Pumps are commonly encountered in industry and are essential to the smooth running of many industrial complexes. Mechanical engineers entering industry often have little practical experience of pumps and their problems, and need to build up an understanding of the design, operation and appropriate use of pumps, plus how to diagnose faults and put them right. This book tackles all these aspects in a readable manner, drawing on the authors' long experience of lecturing and writing on centrifugal pumps for industrial audiences.
