1. Record Nr. UNINA990001743020403321

Autore	Galibert, Leone
Titolo	Storia d' Algeri ... volgarizzamento di Anicio Bonucci / Leone Galibert
Pubbl/distr/stampa	Firenze : G. Celli, 1845-1846
Descrizione fisica	2 v. ; 25 cm
Disciplina	965
Locazione	FAGBC
Collocazione	60 965 B 1
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA990002008440403321

Autore	Peretti, Giuseppe
Titolo	Compendio di fisiologia generale / Giuseppe Peretti
Pubbl/distr/stampa	Firenze : Luigi Macri, 1950
Descrizione fisica	661 p. ; 25 cm
Disciplina	574.1
Locazione	DAGEN
Collocazione	61 III C.5/30
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

3. Record Nr. UNINA9911006654003321

Autore	Thomas Philip
Titolo	Simulation of industrial processes for control engineers / / Philip Thomas
Pubbl/distr/stampa	Oxford ; ; Boston, : Butterworth-Heinemann, 1999
ISBN	1-281-03489-4 9786611034894 0-08-051724-2
Descrizione fisica	1 online resource (415 p.)
Disciplina	621.4021
Soggetti	Process control - Computer simulation Manufacturing processes - Computer simulation Process control - Mathematical models Manufacturing processes - Mathematical models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Simulation of Industrial Processes for Control Engineers; Copyright Page; Contents; Foreword; Notation; Chapter 1. Introduction; Chapter 2. Fundamental concepts of dynamic simulation; 2.1 Introduction; 2.2 Building up a model of a simple process-plant unit: tank liquid level; 2.3 The general form of the simulation problem; 2.4 The state vector; 2.5 Model complexity; 2.6 Distributed systems: partial differential equations; 2.7 The problem of stiffness; 2.8 Tackling stiffness in process simulations: the properties of a stiff integration algorithm 2.9 Tackling stiffness in process simulations by modifications to the model2.10 Solving nonlinear simultaneous equations in a process model: iterative method; 2.11 Solving nonlinear simultaneous equations in a process model: the Method of Referred Derivatives; 2.12 Bibliography; Chapter 3. Thermodynamics and the conservation equations; 3.1 Introduction; 3.2 Thermodynamic variables; 3.3 Specific heats of gases; 3.4 Conservation of mass in a bounded volume; 3.5 Conservation of energy in a fixed volume; 3.6 Effect of volume change on the equation for the conservation of energy

3.7 Conservation of energy equation for a rotating component3.8 Conservation of mass in a pipe; 3.9 Conservation of energy in a pipe; 3.10 Conservation of momentum in a pipe; 3.11 Bibliography; Chapter 4. Steady-state incompressible flow; 4.1 Introduction; 4.2 The energy equation for general steady-state flow; 4.3 Incompressible flow; 4.4 Magnitude of the Fanning friction factor, f; 4.5 Frictionally resisted, incompressible flow through a real pipe; 4.6 Pressure drop due to level difference; 4.7 Frictional pressure drop; 4.8 Pressure drop due to bends and fittings
4.9 Pressure drop at pipe outlet4.10 Pressure drop at pipe inlet; 4.11 Overall relationship between mass flow and pressure difference; 4.12 Bibliography; Chapter 5. Flow through ideal nozzles; 5.1 Introduction; 5.2 Steady-state flow in a nozzle; 5.3 Maximum mass flow for a polytropic expansion; 5.4 Sonic flow; 5.5 Comparison between flow formulae; 5.6 Bibliography; Chapter 6. Steady-state compressible flow; 6.1 Introduction; 6.2 General overview of compressible pipe-flow; 6.3 Frictionally resisted, adiabatic flow inside the pipe; 6.4 Solution sequence for compressible flow through a pipe
6.5 Determination of the friction factor, f6.6 Determination of the effective length of the pipe; 6.7 Sample calculation; 6.8 Explicit calculation of compressible flow; 6.9 Example using the long-pipe approximation; 6.10 Bibliography; Chapter 7. Control valve liquid flow; 7.1 Introduction; 7.2 Types of control valve; 7.3 Pressure distribution through the valve; 7.4 Liquid flow through the valve; 7.5 Cavitation and choking in liquid flow; 7.6 Relationship between valve capacity at part open and capacity at full open; 7.7 The valve characteristic; 7.8 Velocity-head loss across the valve
7.9 Bibliography

Sommario/riassunto

Computer simulation is the key to comprehending and controlling the full-scale industrial plant used in the chemical, oil, gas and electrical power industries. Simulation of Industrial Processes for Control Engineers shows how to use the laws of physics and chemistry to produce the equations to simulate dynamically all the most important unit operations found in process and power plant.The book explains how to model chemical reactors, nuclear reactors, distillation columns, boilers, deaerators, refrigeration vessels, storage vessels for liquids and gases, liquid and gas flow t