

1. Record Nr.	UNINA9910819283303321
Titolo	8th International Conference on Compressors and Their Systems : 9-10 September 2013, City University London, UK // City University London ; in conjunction with Institution of Mechanical Engineers
Pubbl/distr/stampa	Cambridge, UK : , : Woodhead Publishing, , 2013
ISBN	1-78242-170-X
Descrizione fisica	1 online resource (758 pages) : illustrations (some color)
Collana	Gale eBooks
Disciplina	621.51
Soggetti	Compressors
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 at the end of each chapters and index.
Nota di contenuto	Cover; 8th International Conference on Compressors and their Systems; Copyright; CONTENTS; FOREWORD; KEYNOTE PAPERS; What does the future hold for compressor manufacturers?; ABSTRACT; 1 INTRODUCTION; 2 TRENDS IN REFRIGERATION; 3 ADDITIONAL CHALLENGES; 4 ADDITIONAL OPPORTUNITIES; 5 NEW TECHNOLOGIES; 6 JUSTIFICATION FOR THE CHANGE; 7 CONCLUSIONS; REFERENCE LIST; Recent research of novel compression concepts for vapor compression heat pumping, air conditioning and refrigeration systems; ABSTRACT; 1 INTRODUCTION; 2 BOWTIE COMPRESSOR; 3 ROTARY SPOOL COMPRESSOR; 4 Z-COMPRESSOR; 5 LINEAR COMPRESSOR 6 DIAPHRAGM COMPRESSOR7 SUMMARY; 8 REFERENCES; Sliding vane rotary compressor technology and energy saving; ABSTRACT; INTRODUCTION; 1. SLIDING VANE COMPRESSOR TECHNOLOGY AND ENERGY CONSUMPTION; 2. SLIDING VANE COMPRESSOR: PRINCIPLE OF OPERATION; 2. PREMIUM SECTORS OF SVRC; 3. CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; COMPRESSOR SYSTEMS; Experimental study of compressor operating characteristics and performance when using refrigerants R32, R1234yf, and two new low GWP developmental refrigerants as drop-inreplacements for R410A; ABSTRACT; NOMENCLATURE; 1 INTRODUCTION 2 EXPERIMENTAL METHODOLOGY3 RESULTS AND DISCUSSION; 4 CONCLUSIONS; ACKNOWLEDGMENT; REFERENCES; Performance and

suitability comparisons of some R22 possible substitute refrigerants;
 ABSTRACT; NOMENCLATURE; 1 INTRODUCTION; 2 COMPARISONS OF
 DIRECT ENVIRONMENTAL IMPACT; 3 COMPARISONS OF COMPATIBILITY
 WITH EXISTING R22 SYSTEMS; 4 COMPARISONS OF SYSTEM
 PERFORMANCES; 5 CONCLUSIONS; ACKNOWLEDGMENT; REFERENCE
 LIST; Oil level measurement in oil-injected screw compressor packages
 used in the petroleum, petrochemical, refrigeration and fuel gas;
 ABSTRACT
 1 OIL-INJECTED SCREW COMPRESSOR LUBRICATION OIL SYSTEM2 LEVEL
 MEASUREMENT TECHNOLOGIES; 3 CONCLUSIONS; 4 REFERENCES;
 Simulation of a cold climate heat pump furnished with a scroll
 compressor with multiple vapor injection lines; ABSTRACT;
 NOMENCLATURE; 1 INTRODUCTION; 2 COMPRESSOR ANALYSIS AND
 SIMULATION; 3 CYCLE ANALYSIS; 4 COMPRESSOR SIMULATION WITH
 ONE PAIR OF INJECTION PORTS; 5 OPTIMIZATION OF VAPOR-INJECTED
 COMPRESSORS WITH ONE AND TWO INJECTION LINES; CONCLUSIONS;
 REFERENCES LIST; Compressor for exhaust treatment of non-road
 vehicles; ABSTRACT; 1 INTRODUCTION; 2 COR® TECHNOLOGY
 3 COR® COMPRESSOR4 DEVELOPMENT OF PLASTIC ROTORS FOR THE
 COR® COMPRESSOR; 5 CONCLUSION; 6 OUTLOOK; 7 REFERENCE LIST;
 Screw pulsation generation and control: a shock tube mechanism;
 ABSTRACT; NOMENCLATURE; 1. INTRODUCTION; 2. SCREW PULSATION
 GENERATION MECHANISM: A SHOCK TUBE THEORY; 3. PULSATION
 CONTROL: PULSATION TRAP METHOD; 4. CONCLUSIONS AND
 DISCUSSIONS; ACKNOWLEDGEMENTS; REFERENCES; Numerical analysis
 of unsteady behaviour of a screw compressor plant system; ABSTRACT;
 NOMENCLATURE; 1. INTRODUCTION; 2. MATHEMATICAL MODEL OF THE
 SCREW COMPRESSOR PLANT
 3. EXPERIMENTAL VERIFICATION OF THE RESULTS OBTAINED FROM THE
 MATHEMATICAL MODEL

Sommario/riassunto

This book contains the papers from the 2013 International Conference
 on Compressors and Their Systems, held from 9-10 September at City
 University London. The long-running conference series is the ultimate
 global forum for reviewing the latest developments and novel
 approaches in compressor research. High-quality technical papers are
 sourced from around the globe, covering technology development,
 operation, maintenance and reliability, safety and environmental
 impact, energy efficiency and carbon footprint, system integration and
 behaviour, upgrades and refurbishment, design and manufacture, e
