

1. Record Nr.	UNINA9910679280903321
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Titolo	Natural gas engineering handbook / / Boyun Guo and Ali Ghalambor
Pubbl/distr/stampa	Houston, TX, : Gulf Pub. Co., c2005
ISBN	0-12-799997-3 1-59124-969-4
Edizione	[1st ed.]
Descrizione fisica	1 online resource (466 p.)
Altri autori (Persone)	GhalamborAli
Disciplina	665.7
Soggetti	Natural gas Petroleum engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Natural Gas Engineering Handbook -- Contents -- Preface -- List of Spreadsheet Programs -- Spreadsheet Programs and Functions -- List of Nomenclature -- 1 Introduction -- 1.1 What Is Natural Gas? -- 1.2 Utilization of Natural Gas -- 1.3 Natural Gas Industry -- 1.4 Natural Gas Reserves -- 1.5 Types of Natural Gas Resources -- 1.6 Future of the Natural Gas Industry -- 2 Properties of Natural Gas -- 2.1 Introduction -- 2.2 Specific Gravity -- 2.3 Pseudocritical Properties -- 2.4 Viscosity -- 2.5 Compressibility Factor -- 2.6 Gas Density -- 2.7 Formation Volume Factor and Expansion Factor -- 2.8 Compressibility of Natural Gas -- 2.9 Real Gas Pseudopressure -- 2.10 Real Gas Normalized Pressure -- 3 Gas Reservoir Deliverability -- 3.1 Introduction -- 3.2 Analytical Methods -- 3.3 Empirical Methods -- 3.4 Construction of Inflow Performance Relationship Curve -- 4 Wellbore Performance -- 4.1 Introduction -- 4.2 Single-Phase Gas Well -- 4.2.1 The Average Temperature and Compressibility Factor Method -- 4.2.2 The Cullender and Smith Method -- 4.3 Mist Flow in Gas Wells -- 5 Choke Performance -- 5.1 Introduction -- 5.2 Sonic and Subsonic Flow -- 5.3 Dry Gas Flow through Chokes -- 5.3.1 Subsonic Flow -- 5.3.2 Sonic Flow -- 5.3.3 Temperature at Choke -- 5.3.4 Applications -- 5.4 Wet Gas Flow through Chokes -- 6 Well Deliverability -- 6.1 Introduction -- 6.2 Nodal Analysis -- 6.2.1 Analysis with the Bottom Hole Node -- 6.2.2 Analysis with Wellhead Node -- 7 Separation -- 7.1

Introduction -- 7.2 Separation of Gas and Liquids -- 7.2.1 Principles of Separation -- 7.2.2 Types of Separators -- 7.2.3 Factors Affecting Separation -- 7.2.4 Separator Design -- 7.3 Stage Separation -- 7.4 Flash Calculation -- 7.5 Low-Temperature Separation -- 8 Dehydration -- 8.1 Introduction -- 8.2 Dehydration of Natural Gas -- 8.2.1 Water Content of Natural Gas Streams. 8.2.2 Dehydration Systems -- 8.2.3 Glycol Dehydrator Design -- 8.3 Removal of Acid Gases -- 8.3.1 Iron-Sponge Sweetening -- 8.3.2 Alkanolamine Sweetening -- 8.3.3 Glycol/Amine Process -- 8.3.4 Sulfinol Process -- 9 Compression and Cooling -- 9.1 Introduction -- 9.2 Types of Compressors -- 9.3 Selection of Reciprocating Compressors -- 9.3.1 Volumetric Efficiency -- 9.3.2 Stage Compression -- 9.3.3 Isentropic Horsepower -- 9.4 Selection of Centrifugal Compressors -- 9.5 Selection of Rotary Blowers -- 10 Volumetric Measurement -- 10.1 Introduction -- 10.2 Measurement with Orifice Meters -- 10.2.1 Orifice Equation -- 10.2.2 Recording Charts -- 10.2.3 Computation of Volumes -- 10.2.4 Selection of Orifice Meter -- 10.3 Other Methods of Measurement -- 10.3.1 Displacement Metering -- 10.3.2 Turbine Meter -- 10.3.3 Elbow Meter -- 10.4 Natural Gas Liquid Measurement -- 11 Transportation -- 11.1 Introduction -- 11.2 Pipeline Design -- 11.2.1 Sizing Pipelines -- 11.2.2 Pipeline Wall Thickness -- 12 Special Problems -- 12.1 Introduction -- 12.2 Liquid Loading on Gas Wells -- 12.2.1 Turner's Method -- 12.2.2 Guo's Method -- 12.2.3 Comparison of Methods -- 12.2.4 Solutions to the Liquid Loading Problem -- 12.3 Hydrate Control -- 12.3.1 Hydrate-Forming Conditions -- 12.3.2 Preventing Hydrate Formation -- 12.4 Pipeline Cleaning -- 12.4.1 Pigging System -- 12.4.2 Selection of Pigs -- 12.4.3 Major Applications -- 12.4.4 Pigging Procedure -- A Pseudopressures of Sweet Natural Gases -- B Normalized Pressures of Sweet Natural Gases -- C Orifice Meter Tables for Natural Gas -- D The Minimum Gas Production Rate for Water Removal in Gas Wells -- E The Minimum Gas Production Rate for Condensate Removal in Gas Wells -- Index.

Sommario/riassunto

Covering the full scope of natural gas engineering, this must-have handbook includes a focus on real-world needs rather than theory, illustrative examples throughout the text, spreadsheet programs for all fundamental engineering calculations on an easy-to-use CD-ROM included and exercise problems at the end of every chapter.
