1. Record Nr. UNINA9910877422503321 Autore Ocic Ozren **Titolo** Oil refineries in the 21st century: energy efficient, cost effective, environmentally benign / / Ozren Ocic Weinheim,: Wiley-VCH, c2005 Pubbl/distr/stampa **ISBN** 1-280-55796-6 9786610557967 3-527-60414-6 3-527-60445-6 Descrizione fisica 1 online resource (168 p.) Disciplina 338.476655 Soggetti Petroleum refineries - Economic aspects Petroleum industry and trade - Economic aspects Petroleum refineries - Energy conservation Petroleum industry and trade - Energy conservation 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 Oil Refineries in the 21st Century; Table of Contents; Preface; 1 Introduction: 2 Technological and Energy Characteristics of the Chemical Process Industry; 2.1 Possibilities for Process-Efficiency Management Based on Existing Economic and Financial Instruments and Product Specifications in Coupled Manufacturing; 2.2 Importance of Energy for Crude-Oil Processing in Oil Refineries; 3 Technoeconomic Aspects of Efficiency and Effectiveness of an Oil Refinery; 3.1 Techno-economic Aspects of Energy Efficiency and Effectiveness in an Oil Refinery 3.2 Techno-economic Aspects of Process Efficiency and Effectiveness in an Oil Refinery 4 Instruments for Determining Energy and Processing Efficiency of an Oil Refinery; 4.1 Instruments for Determining Energy and Processing Efficiency of Crude Distillation Unit; 4.1.1 Technological

Characteristics of the Process; 4.1.2 Energy Characteristics of the Process; 4.1.3 Determining the Steam Cost Price; 4.1.4 Energy Efficiency of the Process; 4.1.5 Refinery Product Cost Pricing; 4.2 Instruments for Determining Energy and Processing Efficiency of

Vacuum-distillation Unit

4.2.1 Technological Characteristics of the Process4.2.2 Energy Characteristics of the Process; 4.2.3 Determining the Steam Cost Price; 4.2.4 Energy Efficiency of the Process; 4.2.5 Determining the Refinery Product Cost Prices; 4.3 Instruments for Determining Energy and Processing Efficiency of Vacuum-residue Visbreaking Unit; 4.3.1 Technological Characteristics of the Process; 4.3.2 Energy Characteristics of the Process; 4.3.3 Determining the Steam Cost Price; 4.3.4 Energy Efficiency of the Process; 4.3.5 Determining the Refinery Product Cost Prices

4.4 Instruments for Determining Energy and Processing Efficiency of Bitumen Blowing Unit4.4.1 Technological Characteristics of the Process; 4.4.2 Energy Characteristics of the Process; 4.4.3 Determining the Steam Cost Price; 4.4.4 Energy Efficiency of the Process; 4.4.5 Determining Refinery Product Cost Prices; 4.5 Instruments for Determining Energy and Processing Efficiency of Catalytic Reforming Unit; 4.5.1 Technological Characteristics of the Process; 4.5.2 Energy Characteristics of the Process; 4.5.3 Determining the Steam Cost Price; 4.5.4 Energy Efficiency of the Process

4.5.5 Determining the Refinery Product Cost Prices4.6 Instruments for Determining Energy and Processing Efficiency of Catalytic Cracking Unit; 4.6.1 Technological Characteristics of the Process; 4.6.2 Energy Characteristics of the Process; 4.6.3 Determining the Steam Cost Price; 4.6.4 Energy Efficiency of the Process; 4.6.5 Determining the Refinery Cost Prices; 4.7 Instruments for Determining Energy and Processing Efficiency of Gas Concentration Unit; 4.7.1 Technological Characteristics of the Process; 4.7.2 Determining the Refinery Product Cost Prices

4.8 Instruments for Determining Energy and Processing Efficiency of Jet-fuel Hydrodesulfurization Unit

Sommario/riassunto

A very detailed, workable approach to improving energy efficiency and cost effectiveness in petroleum processing, dealing with the role of management and refinery operators in achieving the best technological parameters, the most rational utilization of energy, as well as the greatest possible economic success. The author provides a detailed and well-founded approach to the methodology, information and criteria necessary for analyzing energy use, economics and the environmental impact, as well as solutions for fulfilling the requirements of the Kyoto agreement. In addition, he describes in suf