Refinery Engineering. Integrated Process Modeling and Optimization

Description: Petroleum refining is one of the most important yet challenging industries, and continues to be a major contributor in the production of transportation fuels and chemicals. Current economic, regulatory and environmental concerns place significant pressure on refiners to upgrade and optimize the refining process. At the same time, new product demands are urging refiners to explore alternative processing units and feedstocks.

This textbook represents a pioneering and comprehensive introduction to this complex subject, using many of the tools and techniques currently employed in modern refinery process simulation.

Adopting a systematic and practical approach, the authors include the theory, case studies and hands-on workshops, explaining how to work with real data. As a result, senior-level undergraduate and graduate students, as well as industrial engineers learn how to develop and use the latest computer models for the predictive modeling and optimization of integrated refinery processes.

Company website providing relevant spreadsheets and simulation files for all the models and examples presented in the book.

Contents:

PREFACE

CHARACTERIZATION, PHYSICAL AND THERMODYNAMIC PROPERTIES OF OIL FRACTIONS
Crude Assay
Pseudocomponent Generation Based on Boiling-Point Ranges
Workshop 1.1 - Interconvert Distillation Curves
Workshop 1.2 - Extrapolate an Incomplete Distillation Curve
Workshop 1.3 - Calculate MeABP of a Given Assay
Workshop 1.4 - Duplicate the Oil Fraction in Aspen HYSYS/Refining
Property Requirements for Refinery Process Models
Physical Properties
Process Thermodynamics
Miscellaneous Physical Properties for Refinery Modeling
Conclusions
Nomenclature
References

ATMOSPHERIC DISTILLATION UNIT
Introduction
Scope of the Chapter
Process Overview
Model Development
Feed Characterization
Data Requirements and Validation
Representative Atmospheric Distillation Unit
Building the Model in Aspen HYSYS
Results
Model Applications to Process Optimization
Workshop 2.1 - Rebuild Model Using "Backblending" Procedure
Workshop 2.2 - Investigate Changes in Product Profiles with New Product Demands
Conclusions
PREDICTIVE MODELING OF THE FLUID CATALYTIC CRACKING (FCC) PROCESS
Introduction
Process Description
Process Chemistry
Literature Review
Aspen HYSYS/Petroleum Refining FCC Model
Calibrating the Aspen HYSYS/Petroleum Refining FCC Model
Fractionation
Mapping Feed Information to Kinetic Lumps
Overall Modeling Strategy
Results
Model Applications to Process Optimization
Model Application to Refinery Production Planning
Workshop 4.1: Guide for Modeling FCC Units in Aspen HYSYS/Petroleum Refining
Workshop 4.2: Calibrating Basic FCC Model
Workshop 4.3: Build Main Fractionator and Gas Plant System
Workshop 4.4: Model Applications to Process Optimization -Perform Case Study to Identify Different Gasoline Production Scenarios
Workshop 4.5: Model Application to Production Planning- Generate DELTA-BASE Vectors for Linear-Programming (LP)-Based Production Planning
Conclusions
Nomenclature
References

PREDICTIVE MODELING OF THE CONTINUOUS CATALYST REGENERATION (CCR) REFORMING PROCESS
Introduction
Process Overview
Process Chemistry
Literature Review
Aspen HYSYS/Petroleum Refining Catalytic Reformer Model
Thermophysical Properties
Fractionation System
Feed Characterization
Model Implementation
Overall Modeling Strategy
Results
Model Applications to Process Optimization
Model Applications to Refinery Production Planning
Workshop 5.1: Guide for Modeling CCR Units in Aspen HYSYS/Petroleum Refining
Workshop 5.2: Model Calibration
Workshop 5.3: Build a Downstream Fractionation
Workshop 5.4: Case Study to Vary RON and Product Distribution Profile
Conclusions
Nomenclature
References

PREDICTIVE MODELING OF THE HYDROPROCESSING UNITS
Introduction
Aspen HYSYS/Refining HCR Modeling Tool
Process Description
Model Development
Modeling Results of MP HCR Process
Modeling Results of HP HCR Process
Model Applications to Process Optimization
Model Application -
Delta-Base Vector Generation
Conclusion
Workshop 6.1 -
Build Preliminary Reactor Model of HCR Process
Workshop 6.2 -
Calibrate Preliminary Reactor Model to Match Plant Data
Workshop 6.3 -
Model Applications to Process Optimization
Workshop 6.4 -
Connect Reactor Model to Fractionator Simulation
Nomenclature
References

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