

FCCU Process and Recent Developments

The FCCU is no longer just a fuels producer but is producing petrochemical feedstocks, pretreating tar sands and producing biofuels. The FCC can change operations from the production of large volumes of gasoline blending components (up to 70 volume percent of the pool), to the production of large volumes of diesel blending components (up to 40 volume percent of the pool). The FCCU also produces approximately 110 barrels of product for every 100 barrels of feed. With this range of demonstrated flexibility and volume expansion, the FCCU is one of the most valuable process units in the refinery.

What You Will Learn

Increase awareness of process fundamentals and operating principles for a broader understanding of the various FCC, RFCC and High Olefin FCC (HOFCC) unit process design differences, operating flexibilities and potential equipment revamp opportunities for more operating mode flexibility and future process development.

Introduction to the FCCU Process Flow

FCCU Process Differences

Key Equipment

- FCCU Cracking Reactions and Chemistry
- Catalyst Components and Function

Pressure Balance

- · Heat Balance Effects
- Feed Properties and Operating Variables
- Understanding E-Cat Analyses and Catalyst Testing
- · Fluidization Issues

Future FCCU Technology Development and Operation

- · High Olefin FCCU
- FCCU & Petrochemical Integration
- New FCCU Processes

This two-day course will be given in a classroom/lecture format.

Who Should Attend

Unit operators and supervisors, refinery plant engineers, technical service and process engineers both experienced and new to the FCC.

FCC equipment and process licensers, and service providers

who want a better understanding of the FCC process can also benefit.

Prerequisites

An understanding of refining processes and petroleum refinery terminology is expected, having some experience with the FCC unit is helpful.

In general, attendees should come prepared to share what they want to learn prior to returning to their workplace.

January 20-21, 2015

Training starts at 8:00 am and finishes at 5:00 pm both days. The program includes lunch and coffee breaks. Attendees also receive a training manual that can serve as a valuable office reference. Dress code is casual.

Your Instructor



Christopher F. Dean

has over 35 years in the refining business. His emphasis has been on high severity Fluid Catalytic Cracking operations with petrochemical integration. Before forming the consulting service firm High Olefins FCC Technology Services LLC, he spent fifteen years as a Research and Process Engineering Consultant with Saudi Aramco. His focus was on the development and commercialization of the High Severity-FCC Project and enhancements to existing FCC units for producing light olefins from heavy oils and naphtha.

He initiated research and commercialization studies in catalytic naphtha cracking utilizing the HS-FCC downer reactor technology. In addition he was active in the development of the PetroRabigh integrated refinery and petrochemical joint venture complex and with the future Ras Tanura Refinery expansions and joint venture.

He has published over 30 papers and articles and has been issued two patents on FCC gasoline desulfurization with three other FCC pending process patents.



Course Fees

Early (ends December 12, 2014) **\$1,375**

Regular \$1,575

Prices are in US dollars.

Course Pass is for training only.

Add the Conference Pass
to get complete admittance.

REGISTER NOW

regonline.com/RefCommVegas

Early Registration Ends December 12, 2014

Payment

Due prior to the start of the training by Visa, Master Card, American Express, bank wire transfer or corporate check. Training fees will be charged to your credit card at the time of registration unless other arrangements have been made. Make checks payable to "Coking.com Inc."

Refund Policy

Fees are fully refundable until December 29, 2014 (three weeks before the event), after which a \$200 fee will be charged for cancellations. Registering for this course prior to December 29, 2014 will help maximize the probability that the course will proceed as planned. Cancellations after January 12, 2015 (1 week before class until 24 hours before class) are charged a 50% fee. All other cancellations and noshows are non-refundable. Substitutions are allowed. Submit all cancellations and transfers in writing, by email or by fax.

Please contact us for more information on Refining Community policies.

Hotel Information

Circus Circus Hotel

2880 Las Vegas Blvd S. Las Vegas, Nevada +1 877.434.9175 circuscircus.com/las_vegas_hotel

Use the code **CW01REF**to receive a special room rate
when you book your reservation
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We want you to be safe and reliable

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Winterize for the next polar vortex

Join in the Thursday Winterize Conference as we discuss preparations for the safety challenges of subfreezing weather and actual operations during extreme winter conditions. Refiners and suppliers from around the world will share how they manage severe cold weather. Get practical and valuable guidance from industry experts be prepared for the next polar vortex.

Exhibition

Schedule of events and other classes offered at RefComm during the week of January 19-23, 2015

Monday

Tuesday

Wednesday

Thursday

Friday

SRU Fundamentals

SRU Design and Optimization

Auto-Refrigeration /
Brittle Fracture Prevention

Delayed Coker Operations and Reliability

Coker Process, Design, and Troubleshooting

FCCU Process and Recent Developments

Understanding Fixed Equipment Integrity

Thursday

SRU Operations and Troubleshooting, TGU Review

Winterize Conference

