



### **UOP** modular solutions

UOP's modular equipment offering allows for single-source project management, quick construction in challenging environments, and superior quality control for reliable and cost-effective operations.

As a leader in refining, petrochemical and gas processing technologies, UOP has innovated a total, modularized solution for reliable project execution from a quality, delivery and cost perspective. Designed to get you up and running as much as six months faster, modular equipment from UOP enables refineries to monetize their resources more quickly, even under the most difficult construction conditions or refinery specifications.

UOP's modular units are built under controlled conditions in fabrication shops and are fully inspected prior to delivery. This enables fast-track delivery, quality assurance, and compliance with specifications. The modules are designed to make the most beneficial use of prefabrication, reduce work and increase overall safety at the customer's construction site. This reduces installation time and can allow earlier start up, further improving project economics. UOP has delivered more than 1,500 fully-engineered and pre-fabricated modular process units to customers around the world.

#### **Key Benefits and Features**

- Customized to meet client specifications
- Reduced project risk and execution time
- Quality-controlled for project duration
- Reduced on-site scope of work
- Backed by comprehensive UOP process performance guarantees and mechanical warranty
- Optimized accessibility for safe and efficient operation and maintenance
- Reduced total project cost
- Continued support to help ensure smooth operation

## UOP delivers modular solutions for select licensed technologies, including:

**CCR regenerator sections:** CCR Platforming<sup>TM</sup>, C<sub>3</sub> Oleflex<sup>TM</sup>, C<sub>4</sub> Oleflex<sup>TM</sup> (catalyst circulation rates from 450 to 7,000 pph)

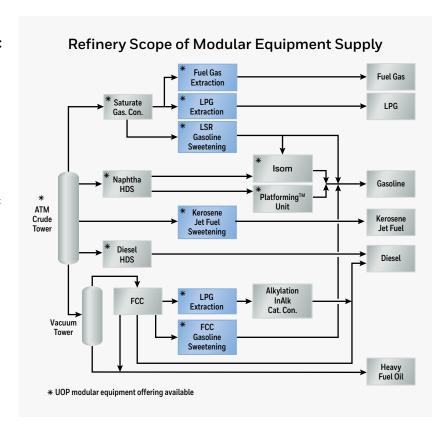
**Isomerization:** Penex<sup>™</sup>, Par-Isom<sup>™</sup>, Penex-Molex, Penex-Plus, Butamer<sup>™</sup> (unit sizes from 1,500 BPSD to 27,000 BPSD)

Merox™: Mixed-butane extraction, fluid catalytic cracking, liquefied petroleum gas extraction, propane-propylene extraction, coker butane extraction, naphtha extraction, heavy FCC gasoline Minalk, light FCC gasoline Minalk, and caustic-free Merox (unit sizes from 650 BPSD to 65,000 BPSD)

**DeFine™:** LAB application (3000 BPSD)

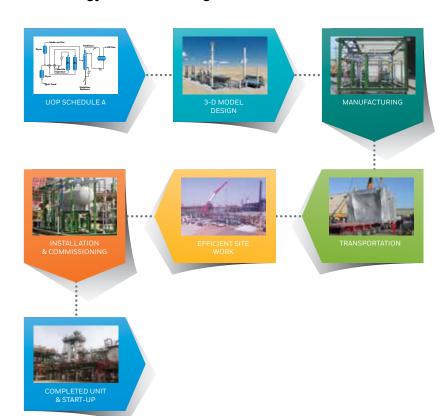
Naphtha complex: Naphtha hydrotreating unit, Platforming and Par-Isom™

**Crude Distillation Unit:** Designed by Process Consulting Services (PCS), UOP partner



## **UOP** modular delivery model

Technology transfer through modularization







## Satisfied customers say it best

# Successful projects around the globe

"Because of close coordination between UOP designers and the client's field engineering, installation was trouble-free. Shop, pre-fit capability for adajacent modules is a definite benefit."

Project manager,
 Canadian refinery

#### Cost and quality

"We chose UOP modular equipment for better quality construction. We experienced significant savings overall, including reduced safety issues and inspections and higher productivity."

Program manager,
 West coast refiner

#### Schedule

"UOP was able to deliver our modular CCR unit ahead of our original schedule, in spite of many challenges UOP had to meet."

Project manager,
 Flour Daniel Houston

#### Successful projects from around the globe



#### For more information

If you are interested in learning more about UOP modular systems, please contact your UOP representative or visit us online at www.UOP.com/equipment/modular-units.

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