

New-Generation UOP Unicracking™ Catalysts



A COMPLETE PORTFOLIO FOR FLEXIBILITY
AND ENHANCED H₂ MANAGEMENT

**Increase hydrocracking unit
profitability in a changing market**

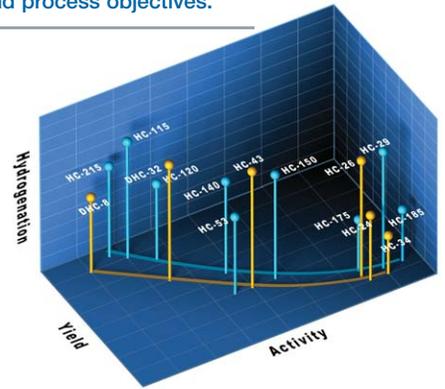
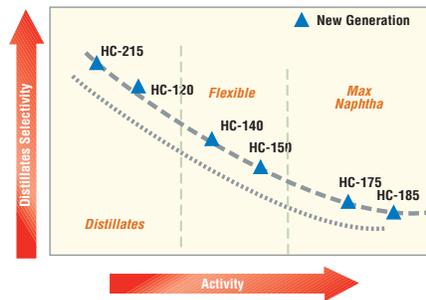
The refining segment is a challenging environment today.

Fluctuating crude prices, heavier feeds and more stringent product quality requirements are driving the need for advanced solutions that can help you best maximize your assets while increasing your profitability. UOP catalyst innovation is focused on helping you address these challenges through a portfolio of high-quality products that offer higher selectivity, higher activity and lower hydrogen consumption where it will help you to meet your product objectives.

UOP new-generation Unicracking catalyst technological edge you need to reach your

UOP offers a well established portfolio of hydrocracking catalysts to meet a wide range of product selectivity and quality targets. In recent years we have developed six new Unicracking catalysts to address the changing demands of our industry and give you the flexibility to achieve your market plans.

UOP's new family of catalysts are designed to provide you with hydrogen management solutions to meet your product and process objectives.



Our catalysts will support your production needs over a range of diesel and naphtha products.

Distillate Production

HC-120 Catalyst
HC-215 Catalyst

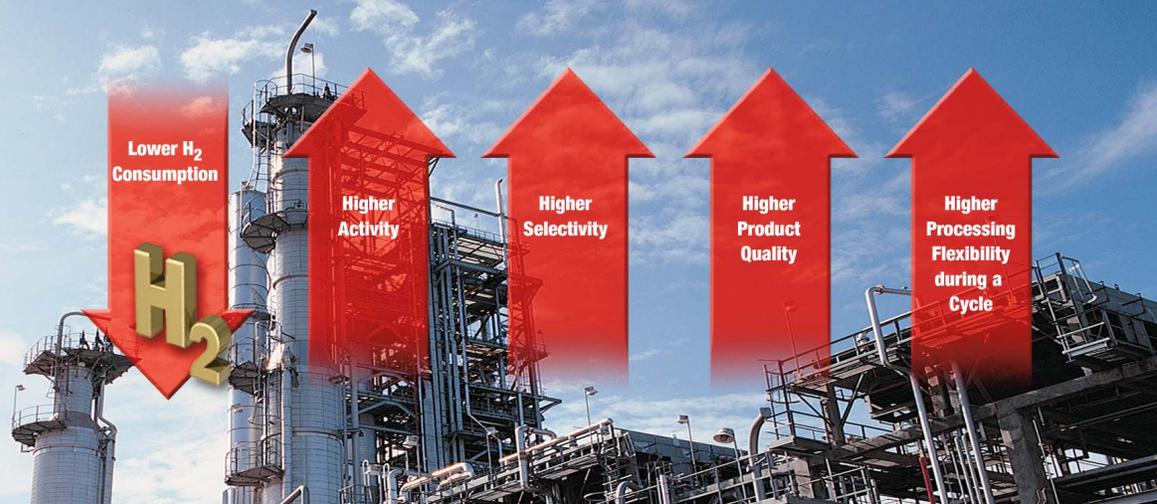
Flexible Production

HC-140 Catalyst
HC-150 Catalyst

Max Naphtha Production

HC-175 Catalyst
HC-185 Catalyst

Drivers for UOP Hydrocracking Catalyst Innovation



Catalysts give you the power to reach your business goals



Our new-generation hydrocracking catalysts are designed for yield, quality and performance improvements that will enhance your profitability. These new generation products offer you distinct operating benefits.

Optimized Hydrogen Addition

UOP's new-generation hydrocracking catalysts are designed to add hydrogen where it best enhances product value.

Improved Product Properties

Depending on your specific goals, UOP catalysts can help you achieve higher cetane, improved cold-flow properties, higher octane and/or higher viscosity index (VI).

Higher Activity

The high activity levels of our innovative portfolio allow for extended run length, increases throughput, lower operating temperatures and the ability to process more difficult heavy feeds.

Improved Selectivity

These advanced products operate at higher selectivity to produce more of your desired product.

Find the Right Solution

Your optimum catalyst solution depends greatly on your specific unit configuration, market plans and business objectives. UOP will work closely with your team to evaluate current unit performance and to identify the best available technologies for your needs. We leverage 50 years of hydrocracking catalyst and process technology know-how to assist you with both process and catalyst issues.

Backed by Commercial Experience

UOP's new-generation hydrocracking catalysts have been utilized by refiners all over the world to realize improved yield and product quality.

	Sold	Operated	Launched
HC-215	16*	14	3/2003
HC-120	4	2	5/2007
HC-150	11*	10	3/2004
HC-140	Now ready for commercialization		
HC-185	4*	3	2/2007
HC-175	1	Q409 Start-up	6/2009

* includes repeat orders

UOP puts rigorous focus on continuously enhancing our technology, and the process we employ is straight forward. We work closely with our customers to clearly identify and prioritize market requirements, and then execute development programs tailored to address key issues and challenges and achieve real-world solutions that best support your needs.

Our research and development programs are led by world-class scientists and engineers with access to state-of-the art facilities and tools, and our pilot plant capabilities are designed to enable rapid commercialization. Since the first commercial catalysts were introduced this type of innovation has enabled continuous step-change improvements in refining processes.

A Complete Portfolio

UOP's six new-generation Unicracking catalysts are each designed to address current market challenges, and to provide you with a wide range of solutions to meet your process operability, product selectivity and product quality targets.

	Distillate			Flexible			Max Naphtha		
Catalyst	DHC-8	HC-120	HC-215	HC-43LT	HC-140	HC-150	HC-24	HC-175	HC-185
Activity	Base	+++	++	Base	-	+	Base	Base	+
Distillate yields, Wt%	Base	+	+++	Base	+	Base	Base	Base	+
H ₂ consumption	Base	-	Base	Base	-	-	Base	--	-
Kerosene smoke point	Base	Base	Base	Base	-	-	Base	Base	Base
Diesel cetane	Base	Base	Base	Base	Base	Base	Base	Base	Base
Cold flow properties	Base	++	++	Base	++	++	Base	Base	++
Stability	Base	++	++	Base	+	+	Base	Base	+

+ Better than base
- Lower than the base

Find out more

If you are interested in learning more about UOP's portfolio of hydrocracking catalysts, please contact your UOP representative or visit us online at www.uop.com.

UOP LLC, A Honeywell Company
25 East Algonquin Road
Des Plaines, IL 60017-5017
Tel: +1-847-391-2000
www.uop.com

UOP5229
September 2009
Printed in U.S.A.
© 2009 Honeywell. All rights reserved.



uop
A Honeywell Company