

# Converter<sup>®</sup>

## Fluid Catalytic Cracking (FCC) co-catalyst succeeds in high-activity catalyst operation

**Converter is part of BASF's Distributed Matrix Structures (DMS) technology and helps refiners increase profitability and gasoline yield while lowering operating costs**

### Introduction

Adding Converter to a unit helps the refiner move lower-valued feed into higher-value product with the goal of shifting yields from unconverted oils to gasoline.

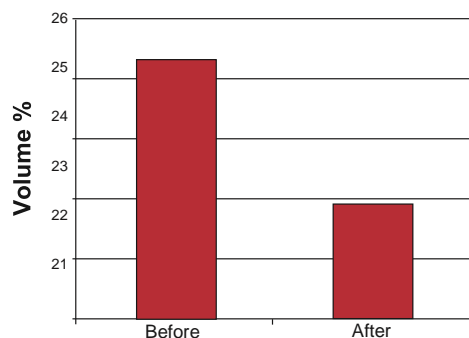
An FCC unit adds Converter hoping to improve selectivity and thus profitability. In addition, the unit uses Converter in conjunction with NaphthaMax catalyst and substitutes some fresh catalyst with a lower amount of Converter to track the resulting product yields.

### Results

BASF's Converter supports the unit's strategic intent and showed:

- Improved profitability by increasing gasoline yield and lowering operating costs
- Higher cat/oil enabling greater value generation through enhanced conversion
- Lower operating costs by maintaining activity with Converter addition only
- Converter addition of 0.08 lb/bbl maintained refinery's effective activity

Figure 1. Reduction in unconverted oils (LCO + slurry)



### Commercial Trial Data for Converter

	Before	After
Relative fresh feed rate	1.0	1.0
Gasoline yield, vol % FF	Base	+2.7
LCO yield, vol %	Base	-1.7
Slurry yield, vol % FF	Base	-0.7% Base
Regenerator temperature, °F	1272	1266
Ecat FACT	78	79
Total surface area m <sup>2</sup> /g	190	195

## About Us

BASF's Catalysts division is the world's leading supplier of environmental and process catalysts. The group offers exceptional expertise in the development of technologies that protect the air we breathe, produce the fuels that power our world and ensure efficient production of a wide variety of chemicals, plastics and other products, including advanced battery materials. By leveraging our industry-leading R&D platforms, passion for innovation and deep knowledge of precious and base metals, BASF's Catalysts division develops unique, proprietary solutions that drive customer success.

**BASF - We create chemistry**

### Americas

BASF Corporation  
25 Middlesex/Essex Turnpike  
Iselin, New Jersey, 08830, USA

### Asia Pacific

BASF South East Asia Pte Ltd  
7 Temasek Boulevard  
#35-01 Suntec Tower One  
Singapore 038987

### Europe, Middle East, Africa

BASF SE  
67056 Ludwigshafen, Germany

### Global Email

[refining-catalysts@basf.com](mailto:refining-catalysts@basf.com)

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