



Hoekstra Trading LLC
November 1, 2017

Release of Independent Catalyst Test Report 2017 FCC gasoline desulfurization for Tier 3 sulfur compliance

Hoekstra Trading has released our eighth annual report, Independent Catalyst Test Report 2017.

- We have done field tests on nine commercial FCC gasoline desulfurizers
- We have done detailed chemical analyses on 70 gasoline samples
- We have quantified the wide range of feed quality in North America
- We have proven that octane loss is high in North American refineries
- We have quantified how feed quality and heavy tails affect unit performance
- We have developed a kinetic model for FCC gasoline desulfurization
- We have enhanced our FCC gasoline process model
- We have made accurate process estimates for design, revamps, and optimization
- We have done a detailed study of Tier 3 regulations and industry response
- We have analyzed the under-investment in North American desulfurization capacity
- We have done an up-to-date analysis of the sulfur credit market
- We have done an up-to-date analysis of the octane market
- We forecast a coming gasoline octane/sulfur squeeze
- We recommend profitable gasoline sulfur credit strategy

All our results are backed by hard data and sound, objective analysis not available anywhere else.

The report includes 15 attachments which are selected publications on the process and the economics of gasoline desulfurization.

Like our seven previous reports, it contains surprising and valuable information you should have.

The attached offer letter contains the Table of Contents plus everything you need to issue a purchase order and get immediate delivery.

This is a shared-cost, multi-client program, your cost is a small fraction of the total program cost.

Join our client group, which now includes 28 clients representing 74 refineries.

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November 1, 2017

Independent Catalyst Test Report 2017

FCC gasoline desulfurization for Tier 3 sulfur compliance

Offer letter and Table of Contents

Offer

Hoekstra Trading LLC is pleased to offer our *Independent Catalyst Test Report 2017* to refiners over 1 million barrels/day, catalyst suppliers, and licensors for a price of \$75,000:

The report includes the following:

1. Independent Catalyst Test Report 2017 Section 1 – Field tests and process model
2. Independent Catalyst Test Report 2017 Section 2 – Competitive analysis
3. Attachments
4. Excel spreadsheet – Hoekstra gasoline desulfurization process model
5. PowerPoint presentation for client meeting.

Items 1-3 will be delivered immediately upon receipt of a purchase order. Items 4 and 5 will be delivered in a face-to-face meeting or remote web conference to last at least one hour at a time that is convenient for you.

In addition, your purchase of this report will include six months of unlimited phone and E-mail consultation on your use of the information in the report.

Attached are the Table of Contents and a sample invoice showing the information needed to issue a purchase order.

There will be no restrictions on how you may use the information you receive in these reports.

This offer is valid until March 31, 2018.

We appreciate your interest in our work.

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FCC gasoline desulfurization for Tier 3 sulfur compliance

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Attachments

Excel spreadsheets-Hoekstra FCC gasoline process model and Hoekstra octane market tool



SAMPLE INVOICE

Hoekstra Trading LLC

DATE: SAMPLE
INVOICE NUMBER: SAMPLE

1961 Dorset Drive, Wheaton, IL 60189
Phone +1 630 330 8159
George.hoekstra@hoekstratrading.com
PNC Bank of Ohio ABA number 041000124 account
number 4602529997
swift code pnccus33
EIN 26-3221486

TO: Sample invoice

PAYMENT TERMS	DUE DATE
30 days from invoice	

quantity	description	unit price USD	line total USD
	Reference PO Number _____		
1	Report, Independent Catalyst Test Report 2017 consisting of: 1. Section 1 – Field tests and process model 2. Section 2 – Competitive analysis 3. Attachments 4. Excel spreadsheet – Hoekstra model	\$75,000	\$75,000
1	Client presentation delivered in remote web conference	No charge	
1	Unlimited phone and E-mail consultation for 6 months on matters related to use of the report	No charge	
Total			\$75,000