KF 870 STARS®
A More Intelligent Catalyst

KF 870 STARS®: Boost Hydrocracker Performance

↑ CYCLE  +20-30%
↑ FEED SEVERITY  +5-10%
↑ DIESEL YIELD  +0.5-1.0%
↑ DENSITY UPLIFT  +0.8-1.0° API

Comparison with KF 868:

VS KF 868

HC-PT CATALYST PORTFOLIO

NEBULA
KF 870
KF868
KF860
KFR22

Value Proposition

<table>
<thead>
<tr>
<th></th>
<th>Base NiMo</th>
<th>Premium NiMo</th>
<th>Top Performance</th>
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</thead>
<tbody>
<tr>
<td>Cycle Length</td>
<td>Base</td>
<td>+20-30%</td>
<td>+40-50%</td>
</tr>
<tr>
<td>Distressed Feed Intake</td>
<td>Base</td>
<td>+5-10%</td>
<td>+10-20%</td>
</tr>
<tr>
<td>Diesel Yield</td>
<td>Base</td>
<td>+0.5-1.0%</td>
<td>+1.0-2.0%</td>
</tr>
<tr>
<td>Density Uplift</td>
<td>Base</td>
<td>+1° API</td>
<td>+2° API</td>
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In 2006, Albemarle and UOP formed the Hydroprocessing Alliance to deliver innovative technologies and catalysts to the refining industry. Today, the Alliance represents greater than 160 years of hydroprocessing experience.

“KF 870 STARS® is the result of collaboration between different disciplines, such as Materials Science, Modeling and Kinetics and Application Technology. This allowed us to create a mental model of how the different functionalities in our catalysts work and how we can improve them. The innovative approach led to KF 870, a catalyst that will deliver excellent performance even at the most severe HC-PT process conditions.”

Eelko Brevoord
R&D Director

#IntelligentCatalysts