Topsoe Stream Management

Stream Management

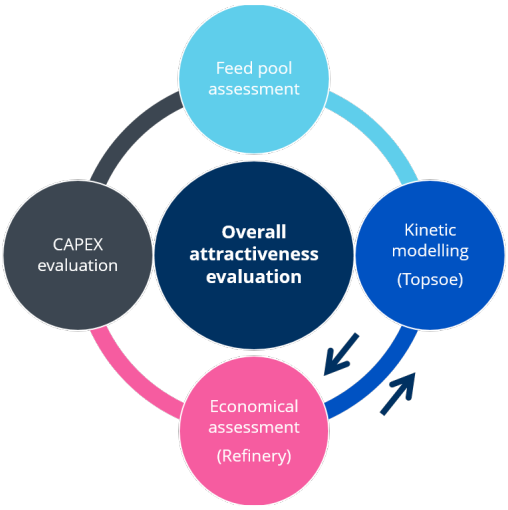
Ensuring optimal utilization of all hydroprocessing units, hydrogen and catalyst

Refiners often face bottlenecks and challenges at their different units. Many times, these are solved within the refinery itself, and only considering a single or maybe a few units. With Topsoe Stream Management the feed and product pool is assessed applying Topsoes advanced proprietary models. That provides a performance optimization at a level unreachable by the refinery alone.

Within the past few years, Topsoe has successfully carried out Stream Management services for a number of clients. These have led to a significant financial gain for the refineries by having Topsoe optimize their plant performances.

Stream Management
Feed and product pool assessment is performed applying Topsoes advanced proprietary models and hydroprocessing knowledge. In some cases even in combination with feed and product analysis from our Topsoe laboratory. As such, it is possible to optimize:

- Performance of the hydroprocessing unit(s)
- Product pool
- Processing of opportunity crudes
- Processing of different streams
- Processing capacity in the hydroprocessing unit(s)



Stream Management case story

Challenge

- Feed blend appeared easy to treat
- The feed blend contained 9% very difficult feed that limited the overall cycle length

Process

Topsoe evaluated all the feed streams:

- Cut-point
- Severity
- Origin

Solution

- The two difficult streams were sent to a bunker producing unit, without reducing client profit
- Feed rate of the other streams were increased, keeping capacity
- The cut-point of remaining streams were changed to include heavier fractions, increasing overall profitability
- Cycle length was more than doubled

Impact of Topsoe Stream Management		
	Before	**After**
Cycle length	6 months	>13 months
Down-time	10 days	0 days
Catalyst charges	2	1
Savings within 1 year	10*600,000# EUR + catalyst charge **> 7 mio EUR**	

Estimated daily loss of production for this major Eastern European refinery

Advantages

- Longer cycle lengths and reduces number of shut-downs
- Full and optimized use of the feed pool
- Higher throughput
- Optimal processing of unconventional feedstocks
- Reduced need for additives

Get in touch today
topsoe.com/contact

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