ExxonMobil

Leading edge aromatics treatment

Energy lives here™

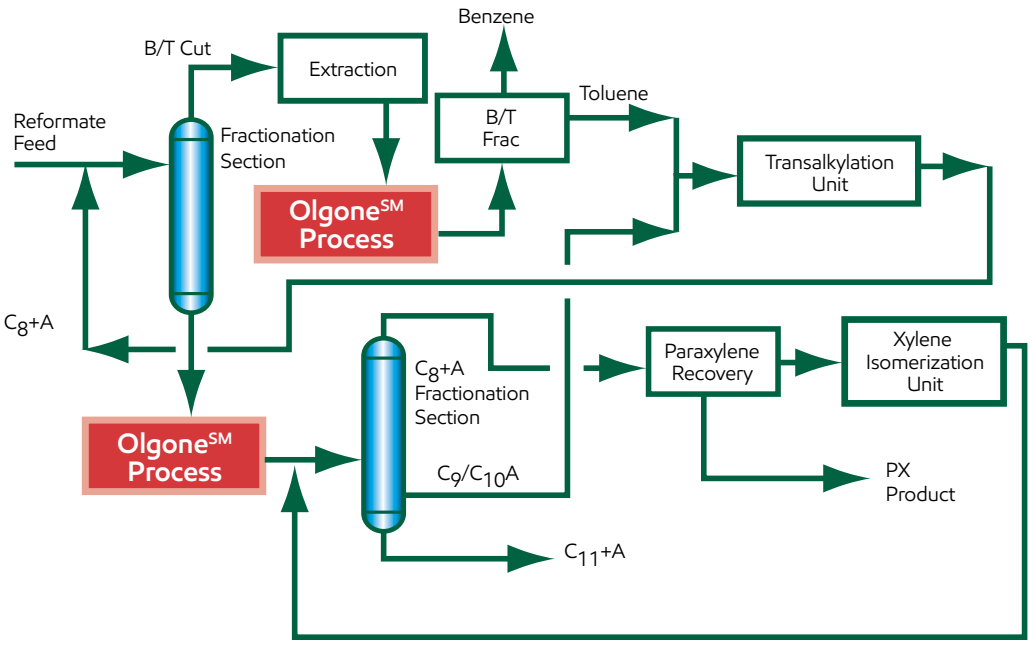
A high-performance, highly-stable catalyst is at the heart of the Olgone℠ Process. This technology is designed to extend cycles of existing aromatic stream treaters, thus reducing the amount of solid waste that is generated. The outstanding performance of the Olgone Process can lead to significant operating cost savings as well as debottlenecking opportunities. The Olgone Process is also licensed by our alliance partner, Axens, as part of the ParamaX℠ technology suite for grassroots aromatics complexes.

Key benefits

- Extended cycles (up to 6 times clay)
- Simple "drop-in" replacement for clay
- Reduced solid waste
- Fewer costly change-outs
- More stable operations
- Increased protection for downstream units
- Lower investment costs

Olgone℠ flowscheme

The following simplified flowscheme shows locations where the Olgone℠ Process can be deployed in a typical fractionation and recovery section of an aromatics complex.



Olgone℠ Process: longer operating cycles, reduced solid waste, capital savings

Long Operating Cycles and Reduced Solid Waste

Unlike traditional clay treating processes, the Olgone℠ Process uses a proprietary catalyst that achieves cycles up to 6 times that of clay. The catalyst is regenerable and can be reused multiple times, meaning solid waste generation is significantly reduced. Spent clay typically represents 25 – 60% of the total solid waste generated in a modern aromatics complex. Our unparalleled Olgone Process has reduced clay waste in one of ExxonMobil's facilities by 85% per year.

Capital Savings: Retrofit or Grassroots

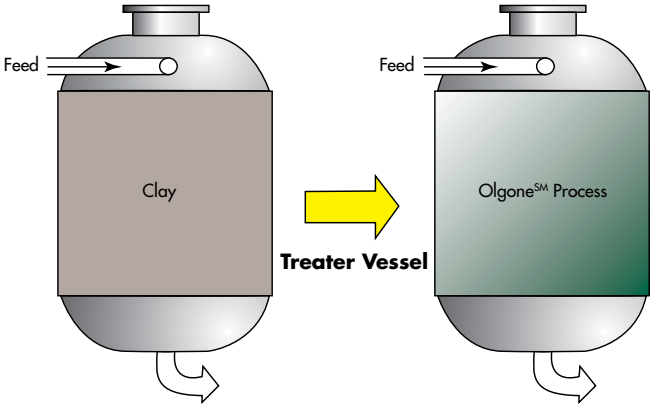
The long cycles of treaters operating the Olgone℠ Process can translate into substantial cost savings. Fewer change-outs result in significantly lower clay costs. In some cases the longer cycle length provided by the Olgone Process can allow a facility limited by clay treatment capacity to avoid installing additional clay treaters. In grassroots applications, treater vessels can be smaller, thereby reducing capital costs.

Other benefits include:

- Better downstream protection – longer cycles reduce the risk of exceeding downstream unit Bromine Index (BI) specifications and the potential for resultant damage to sensitive catalysts and molecular sieves.
- Reduced change-out frequency – reduced labor-intensive and costly clay treater change-outs and a more stable and trouble-free operation.

Retrofit into Existing Reactors

ExxonMobil's state-of-the-art aromatic treatment technology, the Olgone℠ Process, is a simple "drop-in" replacement for clay in existing treaters. Operation is virtually identical to that of the clay it replaces. The only significant difference is the exceptional performance of the Olgone Process.



Olgone℠ Services include:

- Support from initial consultation throughout the life of the operation
- Initial non-confidential meeting
- Detailed Yield Estimate
- Feasibility Study
- Licensing Proposal
- Process Design Package
- Technology transfer, training, catalyst loading and start-up support
- Technology improvements
- Unit performance monitoring
- Access to next-generation processes

About Technology Licensing & Catalysts

ExxonMobil licenses both downstream and chemical technologies and offers proprietary catalysts for fuels, lubricants, plastics and other chemicals. The company's extensive experience can help to provide technology solutions that contribute to cost reduction, environmental compliance, reliability, plant automation, and other areas.

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Please contact us at:
www.catalysts-licensing.com

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