Refinery Walk-Through

Exploring the hidden potential of your refinery

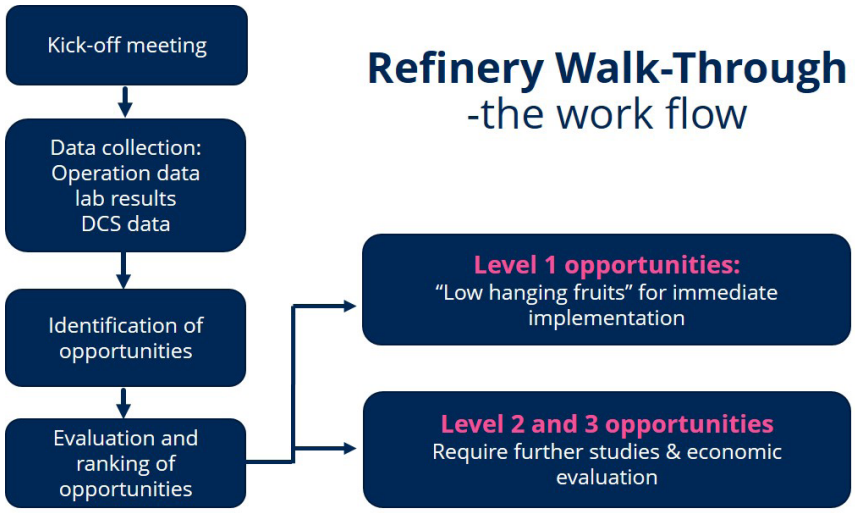
Refinery processes are complex and filled with potential sources of inefficiency. A Topsoe Refinery Walk-Through will identify the hidden opportunities and help you improve the refinery profitability, flexibility, safety, and reliability.

Within the past few years, Topsoe has successfully carried out Refinery Walk-Throughs covering hydroprocessing, hydrogen- and sulfur management applications. The goal is to identify potential areas of improvements and optimizations. These improvements include profitability, reliability, flexibility, safety, and emission reduction.

Refinery Walk-Through
Our technical service team will visit your refinery to identify and classify opportunities by levels. This will give you the overview of possible modifications required to optimize your plant performance.

In practice, this is done by combining knowledge and experience from a team of Topsoe process and catalyst specialists and the skilled process engineers and operators at your refinery.

The work flow for Refinery Walk-Through is shown to the right



Level 1 opportunities
"Quick win" recommendations focusing on optimizing the existing operation with low or no hardware cost:

- Optimizing columns operating parameters
- Energy optimization
- Improving quality and analytical procedures
- Operational philosophy improvements/troubleshooting

Level 2 opportunities
Recommendations that require further thorough investigations, including economical evaluations (capital outlay and ROI):

- Study of new modes of operation
- Design of new equipment
- Corrosion mitigation (e.g. metallurgy upgrading)
- Introduction of power recovery turbines
- Advanced process control (e.g. load temperature management in H_2 units)
- Stream management studies
- Pilot plant test studies

Level 3 opportunities
Recommendations that require larger investments such as revamp engineering design packages and catalyst change out:

- Incorporating advanced process technologies
- Change in unit layout (e.g. cold separator to hot separator)
- Addition of reactor internals or change of catalyst
- Additional upgrading (e.g. de-waxing, back-end shift, etc.)
- Unit revamp to enhance capacity, quality upgradation, increasing cycle length etc.

Advantages

- Operational cost reduction
- Energy optimization
- Maximize throughput
- Yields improvement
- Higher quality products
- Increased cycle length
- CO_2, SO_x, NO_x emission reduction
- Better utilization of H_2

Get in touch today
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