Caustic & MEROX treatment

Consultant / Trainer:

Egbert van Hoorn & Frank Oehlschlaeger

The **Petrogenium.** Caustic and MEROX Treatment training provides unique insight into the design and operation of Sulphur Recovery and Tail gas treating units. Over many years the **Petrogenium.** experts have gathered deep technical expertise in caustic treatment and processes. This knowledge and resulting best practices built the foundation for the course.

Participants

This **Petrogenium.** course can be tailored for awareness/inexperienced staff, for intermediate and for experienced personnel. Furthermore the course can be customized for a specific refinery, plant or unit. The option for post-course consultancy/help-desk support is also available.

Participants may include: Experienced operators; Unit and responsible engineers; in Downstream Refinery, Upstream Oil and Gas or LNG establishments.

The duration of the course is flexible. 1 day is the minimum although this can be extended to 2 or 3 days dependent on the client: the programme example given is for 3 days. Operator training will typically be limited to 2 days.

Learning Objectives

The seminar time and content can be adapted to client requirements because of its modular concept. It can be given in one, one-and-a-half, two or three days, dependent on the subjects of interest for the client. The best results are gained with the inclusion of client operating data and problems into the discussions and exercises.

Programme

Day 1

- Introduction
- Caustic treating principles
- Caustic treating for H2S removal and prewash
- Amine H2S extraction of LPG fractions:
  - Importance for pretreatment
  - Reduction of caustic consumption
  - Main operation points
- Mercaptan extraction from LPG fractions:
  - MEROX® process
  - THIOLEX® process
- Mercaptan extraction from condensate fractions
- Exercise on understanding

Day 2

- Mercaptan extraction from light gasoline fractions
- Equipment Review for extraction of RSH
- Required analysis and schedule
- Troubleshooting operational problems
- Mercaptan sweetening of normal gasoline fractions:
  - Traditional sweetening process
  - Minalk® process
  - Mericat® process
  - Caustic free process
- Required analysis and schedule
- Troubleshooting operational problems
- Exercise on understanding

Day 3

- RSH sweetening of Kerosene fractions
  - Traditional UOP fixed bed process
  - Modern UOP fixed bed process
  - Mericat J® process
  - Caustic free process
- Required analysis and schedule
- Troubleshooting operational problems
- Exercise on understanding
- Minimizing caustic disposal
- Caustic neutralization and oxidation
- Summary