

A tailored methanol training programme for Scorpio Ship Management

CUSTOMER CASE STUDY



The Case

Scorpio Ship Management approached ChemServe with a request for methanol training tailored to their operations department.

Stated priorities were coating memory in epoxy tanks, changeovers involving methanol, and the interpretation of Wall Wash Analysis. In preparation, both teams agreed the technical focus and the operational cases to be used as reference points.

ChemServe developed a custom one-day programme of six modules, delivered on-site at Optimum's office in Athens by Sascha Röwe.

Contents

- The scope and structure of the one-day programme delivered in Athens.
- Technical topics that received the most discussion during the training.
- Feedback from participants and how the material is applied by Optimum's superintendents in their work.
- Notes for other operators considering a comparable training format.

ABOUT

CAPT. SASCHA RÖWE

Operations Director, ChemServe



- Master and Chief Officer on chemical tankers
- Operations Director at ChemServe GmbH
- Lecturer at the Universities of Applied Sciences in Bremen and Bremerhaven, focus areas Safety and HRM
- Occupational safety specialist and forward merchant
- 25+ years of experience in chemical shipping and tank cleaning

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Structure of the training developed for Scorpio

The training was structured to follow the operational sequence of a methanol voyage. It starts with the substance itself, moves through tank preparation, and finishes with verification methods. Each module concludes with a short exercise so that the technical content is discussed against real decisions from the participants' work. The examples used in each module were selected in the preparation phase with the Optimum team.

THE MODULES

1

Hazards of methanol

Toxicity with delayed symptoms of 8 to 36 hours, flammability, and the flame that is difficult to see in daylight. Participants review OSHA and ACGIH limits, PPE selection, respirator limitations, and firefighting principles including AR-AFFF foam.

2

Tank preparation for methanol

Coating compatibility, multi-voyage cargo history analysis, and the epoxy memory effect. The module also covers the difference between conditioning time and cleaning time, and it establishes a practical sampling strategy.

3

Loading, voyage, discharge

Three stop points structure the operational sequence, namely pre-start, topping-off, and end-of-discharge. The module also addresses static electricity risk, vapour management, sampling under pressure, and the situations that should trigger an escalation to the office.

4

Changeovers between cargoes

Methanol to and from ethanol, where denaturants and water pickup require close attention. Methanol to and from clean petroleum products, where hot wash, detergent, drying, and interface management are essential. Sequencing risks for epoxy tanks receive particular focus.

5

Wall Wash Analysis and Spectrometer

WWA methodology in detail, including ASTM D1722 and typical parameters such as colour by Pt-Co, chlorides, and permanganate time. Spectrometer readings are covered so that the operations team can interpret them with confidence. The module also addresses the limits of the method.

6

Claims prevention case and quick assessment

A real case in which benzene loaded four voyages earlier caused a subsequent styrene cargo to go off-spec. Participants complete three tasks. First, they identify the root causes. Second, they draft a message to the charterer. Third, they define the non-negotiables under laycan pressure.

Three technical points that received the most discussion.

The topics below were discussed at length during the training. They are documented here because they are routinely underestimated at the planning stage and remain relevant well beyond a single voyage.

1

Methanol flame visibility

Methanol burns with a near-colourless flame that is difficult to see in daylight. This has practical consequences for incident response: infrared and thermal checks are used at any suspicion of fire, and the working assumption is that the substance is burning until this has been verified otherwise. Standard visual confirmation is not a reliable indicator.

2

Coating memory and residue desorption

Epoxy coatings absorb solvent-type cargoes, in particular BTX aromatics. Following voyages with non-solvent cargoes may still leave adsorbed material in the coating. A subsequent methanol, styrene, or MEG cargo can then extract these residues and go off-spec. Reviewing only the previous cargo is not sufficient in these conditions.

VOYAGE -4
Benzene

VOYAGE -3
non-solvent

VOYAGE -2
non-solvent

VOYAGE -1
non-solvent

VOYAGE 0
Styrene,
off-spec

Illustration of coating memory. A styrene cargo extracts benzene that was loaded four voyages earlier from the epoxy coating, resulting in an off-spec cargo despite the fact that the intermediate cargoes were formally acceptable.

3

Wall Wash Analysis: interpretation and limits

Wall Wash Analysis checks the exposed tank surface. Substances that remain absorbed within the coating film are only detected after sufficient desorption time has passed. A pass result under a tight laycan indicates surface cleanliness, but it is not confirmation that the tank is fully desorbed. Where the cargo history includes solvent-type substances, additional conditioning time should be planned before loading a sensitive grade.

The Feedback

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The training covered the topics our operations department had identified as priorities, in particular coating memory in epoxy tanks and the interpretation of Wall Wash Analysis. The material is applied by our superintendents in their daily work on methanol voyages.

Capt. Stratos Zeimpekis

Head of Operations, Optimum Ship Services

About

ChemServe's experts run regular workshops and targeted crew trainings, carry out inspections, and advise on difficult cleaning cases.

This expertise also drives the MIRACLE platform, ChemServe's flagship product for tank cleaning, compatibility, safety data and cargo compliance, ashore and on every ship.

We would be glad to hear from you. Whether you have a question about a specific cargo situation, an idea for a training programme, or simply want to understand what MIRACLE can do for your operation, please get in touch.

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