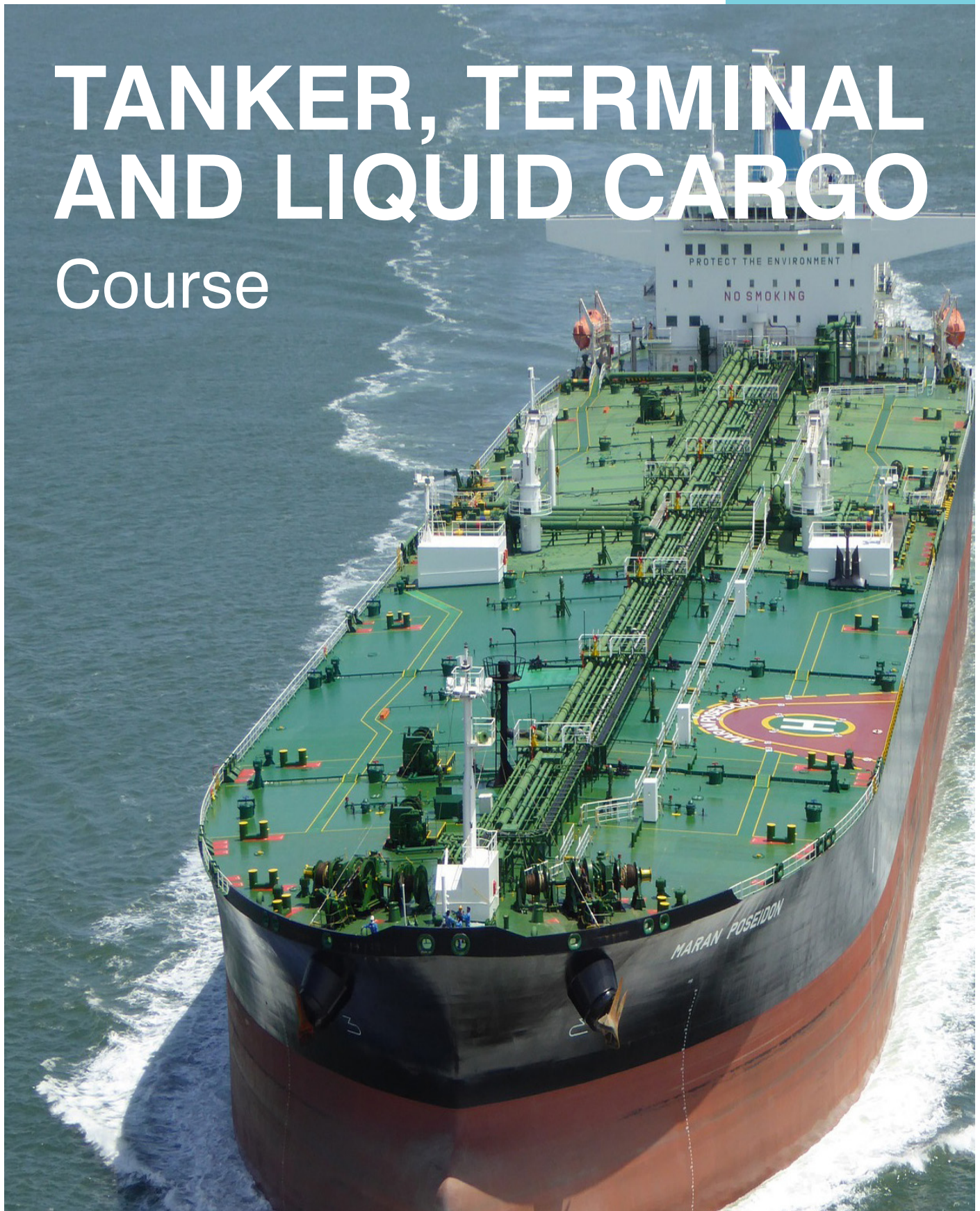


TANKER, TERMINAL AND LIQUID CARGO

Course



TANKER, TERMINAL AND LIQUID CARGO COURSE

A THREE DAY ON-SITE EXPERIENCE

OBJECTIVES OF THE COURSE

We will give our participants an exclusive view in the transport, handling and operational proceedings of liquid products such as mineral oils, chemicals and vegetable/ edible oils, marine fuels as well as bio fuels.

Participants will be taken on a journey through the port of Rotterdam, the beating heart of Europe's petro-chemical industry, whereby various tanker terminals, laboratories and, if possible, tanker vessels will be visited.

The course has been developed to give a further insight into:

Transport and handling of a wide variety of liquid products

- The role of the terminal in the supply chain and operations
- Laboratory services
- Marine fuel issues
- Technical aspect for carrying wet bulk cargo
- Technical systems on board tanker vessels



CRUDE OIL TERMINAL

Places that we will visit include one of the largest (crude) oil terminals in the world, with a yearly throughput of 35 and 40 million tons of oil. +

The terminal serves as the heart of the logistics chain between oil producers and oil refineries via a complex and extensive piping system that also serves the ports of Flushing and Antwerp.

The terminal's strategic location allows even the largest ULCC's (over 400,000 tons DW and with a draught exceeding 22 mtr.) to moor alongside her jetties.

During our visit, the participants are shown a presentation which gives an inside view of the magnitude of the terminal and its role in the oil supply chain.

Further attention will be given to the terminal's loading and discharge facilities as well as the mooring facilities with its laser controlled docking systems.

Following our trip along the terminal the participants are given the opportunity to climb the stairs of a terminal's, 22 mtr. high, shore tank.

On top of the tank, there is a magnificent view on the floating roofs with a diameter of 85 mtr. and, weather permitting, the Maasvlakte area including the North Sea on the horizon.

ALTERNATIVE FUELS/BIO DIESEL

Another highly interesting course experience is definitely a lecture regarding lubricants and bio fuels.

Our interest during the visit is primarily focused on activities in exploiting alternative fuel markets such as bio diesel but also new technics to create fuels from waste streams.



CARGO RECONDITIONING

Liquid products are transported against their own product specifications. However, there are multiple reasons for not meeting these, often tight, specifications. In those scenarios, the product is to be considered “off-specification” and remedial actions may be required.

One of those actions could be reconditioning for which we will visit a company that takes an innovative approach to recovering and reprocessing contaminated or off-spec petroleum products and petro chemicals, something which will be explained in detail during the visit on site.



VEGETABLE OILS AND FATS

Of course the journey is not complete without having visited a vegetable/edible oil storage facility. For this purpose we will visit a terminal where numerous vegetable and edible oil products are stored awaiting further dispatch. The terminal is one of the largest in their field in the port of Rotterdam.

During a guided tour around the terminal, you will be familiarised with the different products on the terminal, the loading and discharging facilities, including the cargo control room and the specific cargo handling particulars (for instance with regard to heating and segregation of cargoes). A visit on board a tanker vessel is another possibility, depending on availability.



LABORATORY

For a more analytical view on liquid cargoes you will be guided through one of the leading laboratories in the Rotterdam-Botlek area. During this visit we will go further into the role of the cargo inspector during cargo operations.

Further you will witness several analyses performed by laboratory analysts according to the ASTM standards, such including product colour tests, chloride tests, UV Scans, GC analyses, the principles of distillation, determination of non-volatile matters, water miscibility etc.



PUMP SYSTEMS

Hence, one of the experiences that you must not miss is our visit to the workshop of a main supplier of cargo pumping systems in the marine industry.

Most of all they are well known for the development of the one-pump-per-tank, submerged cargo pumping system.

A complete pumping system may comprise of electrical or hydraulically driven cargo pumps, a portable emergency pump, ballast pumps, tank cleaning pumps, deck heaters, hydraulic power unit and control / monitoring systems.

These systems, which satisfy requirements for safe and profitable cargo handling, efficient stripping and tank cleaning, include cargo pumps with individual pump capacities between 50 and 2.000 m³/h and total discharge rates up to 15,000 m³/h.

During our visit at the workshop, the operational part of the system is explained in detail via a technical presentation of the system.

Alternatively, you will have a unique chance to see the system in operation in a workshop test facility.

Subject facility is a scale sized cargo tank provided with a glass wall so that you will actually see the cargo pump and cleaning machine in real operation.

This is definitely one of those things that you will not even see on a tanker vessel itself and therefore an experience that you cannot afford to miss!



TARGET AUDIENCE

The course is especially for claim handlers and marine underwriters and people employed in the tanker business and keen to learn further.

ARRANGEMENTS

The course and on-site visits will be given by senior surveyors of BMT Surveys and the group will be limited to a number of 7-8 participants per course, in order to offer optimum personal attention.

We will provide the necessary safety gear and suitable working clothes for this practical course, as well as guided transportation to and from the port/ship.

Lunch breaks and dinners will be hosted by BMT Surveys. We will arrange the evening entertainment programme and members of our staff will be available during the evening meals to offer explanations and discuss everything seen during the day.

The course takes place from Tuesday evening to Friday afternoon (13:00 hrs.). Each participant will receive a certificate of participation.

The programme depends on the availability of terminals and may be subject to alterations.

For more information, please visit our website:

www.bmtsurveys.com

WE LOOK FORWARD TO WELCOMING YOU TO ROTTERDAM!