

An introduction to bunkering operations

Increased legislation has raised awareness of fuel quality and husbandry on board ships. However, it is important to remember that simply bunkering fuel and storing it on board is not enough. The majority of commercial shipping continues to burn heavy fuel oil which requires treatment before being consumed. Providing modern machinery with the correct quality heavy fuel requires a well trained team and a range of procedures that need to be properly managed.

Personnel involved in the storage, blending, delivery, sampling and handling of marine fuels will therefore find *An Introduction to Bunker Operations* by Nigel Draffin a useful addition to their technical library. This is the author's third book about fuels and bunkering, and he has contributed articles on this subject to *Marine Propulsion & Auxiliary Machinery*.

Taking the reader back to the basics of marine fuel management, Draffin clearly and logically describes processes such as ordering and receiving bunker deliveries, the purpose and roles of key players within the supply chain and, for those unfamiliar with the layout of a ship, it illustrates some typical system arrangements and equipment used on board.

Safety and sampling are two critical issues given excellent coverage. Fuel testing laboratories, classification societies and P&I clubs are reporting increasing cases of off-spec fuel that can lead to costly vessel downtime if not dealt with correctly. To make a claim against the supplier, procedures such as correct sampling and accurate documentation are of paramount importance. Both of these subjects are covered in some detail.

The book is well laid out with a good collection of photographs and illustrations. The technical content is clearly explained benefiting all marine professionals including recent recruits to the industry and also those from other industries with a thirst for maritime knowledge.