

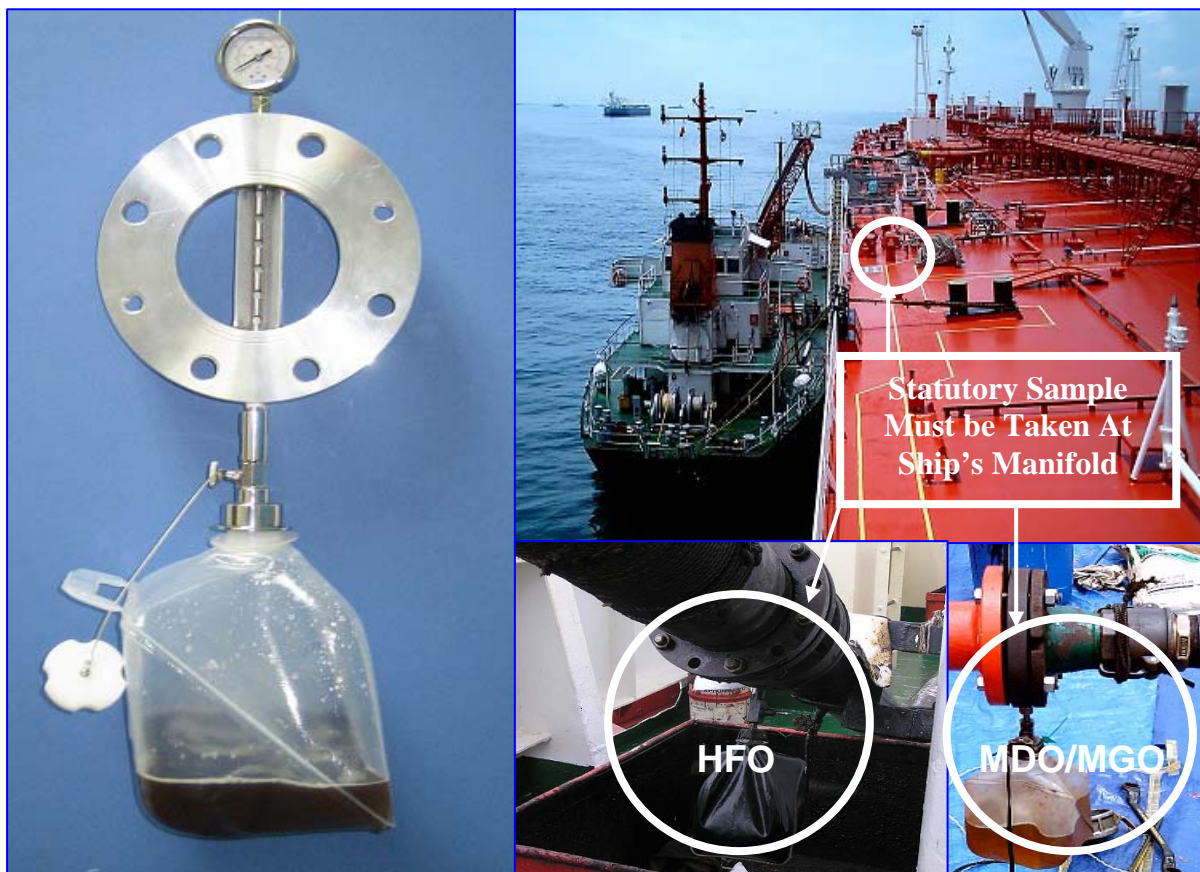


# MARITEC

## CUSTODY TRANSFER SAMPLER

**ANNEX VI OF MARPOL 73/78 & EU DIRECTIVE 47  
Requires Statutory Sampling At Ship's Manifold.**

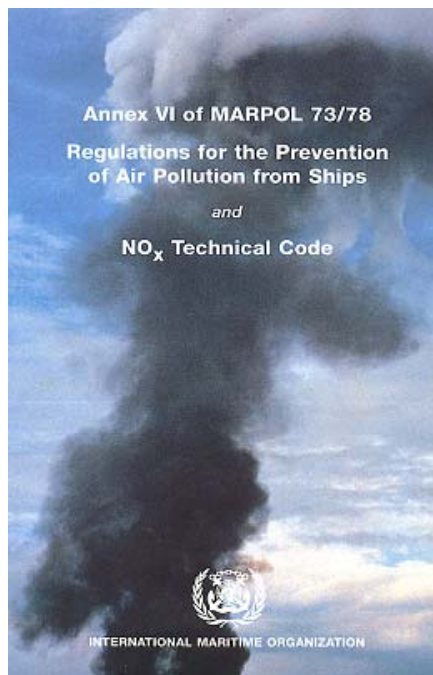
(Compliance Required from 19<sup>th</sup> May 2005)



MARITEC Provides Solutions to  
Mandatory Requirements Of  
MARPOL ANNEX VI, EU DIRECTIVE 47  
SINGAPORE CP 60:2004, ISO 8217

**Marine Fuel Solutions**





## IMPORTANT BACKGROUND INFORMATION

With effect from **19 May 2005**, Annex VI of MARPOL 73/78 Regulations for the Prevention of Air Pollution from Ships will become mandatory for all ships above 400 GT.

### Mandatory Ship Sample

Separate samples of the HFO and MGO/MDO are required to be taken at the ship's bunker manifold and stored until the fuel has been used up but in any case for a minimum period of 12 months. The Bunker Delivery Note itself must be stored for a period of 3 years and be readily available for inspection at all reasonable times. The Government



Sampling Location at Ship's Manifold

bodies in the various countries are required to ensure compliance. This means that all ships above 400GT, must be

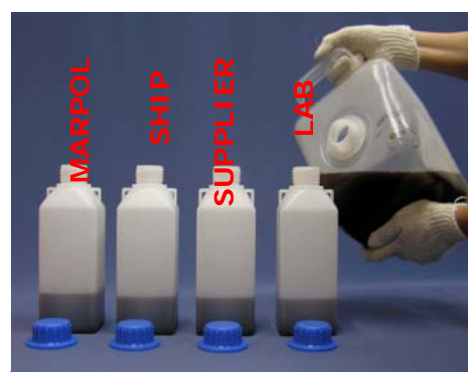
fitted with samplers at the bunker manifold for HFO and MDO/MGO in order to be able to take the "statutory samples" required by Annex VI of MARPOL 73/78.

### Sampling Method and Size of Sample

Under MEPC 47 Annex 2, the sampling method is clearly specified to be by a continuous drip method (using either a manual or automatic sampler) taken throughout the whole bunkering period at the ship's manifold. Sampling at the time and place of custody transfer is also a requirement in ISO8217. The "statutory sample" size should be minimum 400mls and is required for every bunkering.

### Marpol's Other Fuel Quality Requirements

The sulphur content is not the only quality parameter requirement under MARPOL Annex VI 73/78. Under Regulation 18 it is stated that the fuel should be free from inorganic acids and shall not include any added substances or chemical waste which will jeopardize the safety of the ship or adversely affect the performance of machinery or is harmful to personnel etc. It is obvious that a 400 ml sample will not be sufficient and extra sample volume is definitely needed for confirmation testing against the statutory requirements or where a commercial dispute on quality arises.



**Maritec** is the first testing company to provide a 40 bottle Sampling Kit. 4 bottles of 750 ml each are used in each bunkering. This meets both the Annex VI and Singapore CP 60 (2004) Requirements.

### Meeting Singapore CP 60: 2004 Requirements

Maritec recommends 4 x 750 ml sample bottles because of the additional fuel quality prohibitions (mentioned above) required by MARPOL. The 750 ml bottles also ensure that you meet the port requirements when bunkering in Singapore, the world's largest bunkering port. The Singapore Code of Practice CP60: 2004 Clause (13.1) states "Custody transfer sampling shall apply to all bunker deliveries based on FOB terms in the Port of Singapore. The custody transfer sample shall be taken at the manifold of the ship. Should disputes arise the custody transfer sample shall be the official sample for ascertaining the quality of bunkers delivered." In addition Annex J: (J7) states "The homogeneous sample is then poured in equal small portions into at least four sample containers, making three or four passes to fill each container in turn. The minimum quantity of the identical samples shall be not less than 600ml per container. For bunker samples to have repeated tests, a minimum quantity of 750ml is required." This Code of Practice is mandatory by the



Maritime Port Authority in Singapore with effect from 19 May 2005 (i.e. on the same day as MARPOL Annex VI 73/78.)

### **Meeting Various Sulphur Emission Limits**

MARPOL Annex VI 73/78 has a 4.5% sulphur limit. This is achievable by suppliers in most ports around the world if you specify the limits in your purchase specification. However, both MARPOL and the EU have defined SECA (SO<sub>x</sub> Emission Control Areas) where fuel sulphur levels may not exceed 1.5%. The first of these SECA will be the Baltic Sea, which will come into effect on 20 May 2006. The North Sea and English Channel will become SECA in 2007. The European Union (EU) has its own requirements and the 1999/32/EC Directive also requires a 1.5% sulphur limit for regular passenger services between EU ports. A sulphur limit of 0.1 % on fuel used by inland ships and seagoing ships at berth in EU ports is being considered for implementation on 1 January 2010. An early review to be conducted in 2008 will consider an intermediate limit of 0.5% sulphur. In any case, it must be in the interest of ship-operators to test the sulphur content to ensure it complies with the Regulations, rather than face the heavy penalties for exceeding the limits.

### **MARITEC CUSTODY TRANSFER SAMPLER**

#### **Advantages Of Maritec Custody Transfer Sampler :-**

- MARITEC Custody Transfer Samplers are reasonable priced.
- All Samplers come with 10 pieces of 5 litre “cubitainers” complete with 10 pieces of seals (Free of Charge).
- It is the only sampler in the market fitted with a compound gauge as a standard supply.
- The gauge helps to detect excessive bunker manifold closure or over-throttling that could result in oil spills and heavy penalties under OPA 90.
- Fluctuating gauge readings provide an indication that air or water is being pumped into the bunkers and helps to detect any “capucchino” bunkering activities.
- Made in corrosion-proof AISI 304 Stainless Steel. Hence, avoids misleading analysis result of excessive iron from rust if a mild steel sampler is used.
- Custom made to your fit your ship’s bunker manifold.
- Easily installed in minutes even without tools. Can be conveniently transferred to Port or Starboard depending on berthing requirements. Hence only need to buy one sampler for HFO and one for distillate fuel.
- Sampler can be conveniently reversed when de-bunkering so that a sample can be taken as further evidence in case of poor quality fuel.
- Specially designed baffle plate, builds up the pressure of fuel entering the unique “drilled-through” probe thereby enhancing sample taking regardless which way the probe is facing.
- The probe is designed for easy removal and cleaning after use.
- Asbestos-free gaskets are supplied between the ship’s manifold flange/sampler and between sampler/bunker hose flange. (Free Of Charge)
- Extra long bolts and nuts are provided to cater for bunker manifold and bunker hose flange thicknesses. (Free of Charge).
- The “cubitainers” provided are fitted with handles and no “shaking cartons” are required.
- The handle makes for easy handling, shaking and pouring of the main sample. The handle can also be tied to the bunker manifold to secure it as an added measure.



**MARPOL ANNEX VI 73/78 REQUIREMENTS IS COMPULSORY**

**Contact Maritec Now - We Are Ready To Assist You**



## MARITEC CUSTODY TRANSFER SAMPLER



### MARITEC CUSTODY TRANSFER SAMPLER IS SUPPLIED COMPLETE WITH

- Custom Made AISI 304 Stainless Steel Flange
- Purpose Built Probe Baffle Plate
- Detachable Stainless Steel Sampling Probe
- Stainless Steel Needle Valve
- Needle Valve Locking Device
- Compound Gauge : Range (-1 Bar To +20 Bar)
- 10 Free 5 Litre Cubitainers With Handles
- 10 Sets Of Security Seals
- Customised Extra Long Nuts And Bolts
- 2 Pieces Asbestos Free Gaskets

**MARITEC PTE LTD**

**Company Registration Number 199906554N**

192 PANDAN LOOP, #05-26/27/28 PANTECH INDUSTRIAL ESTATE SINGAPORE 128381

Tel: (65) 62718622 Fax: 6271 9236

Email :admin@maritec.com.sg

Website: www.maritec.com.sg.