MARPOL ANNEX VI COMPLIANT LINE SAMPLER

YOUR FUEL MANAGEMENT PARTNER

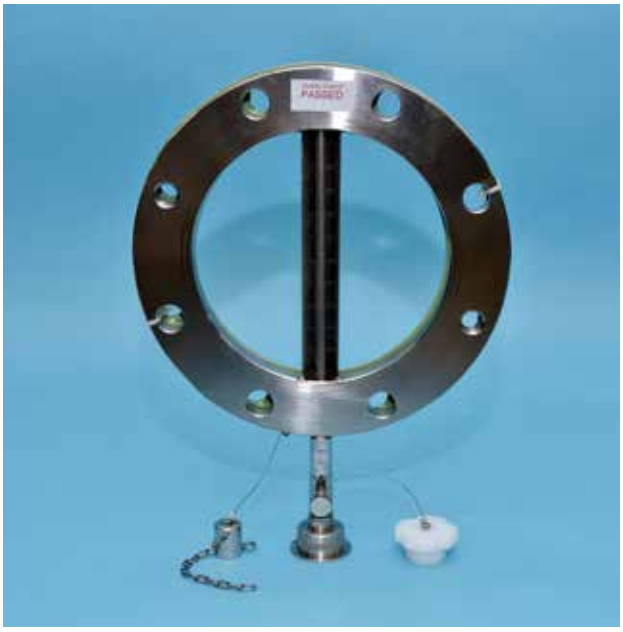
MARPOL Annex VI Compliant Line Sampler

OUR LINE SAMPLER IS FULLY COMPLIANT WITH MARPOL 73/78 ANNEX VI AND HAS PROVEN ITSELF OVER MANY YEARS AS A TAMPER-EVIDENT, RELIABLE AND COST EFFECTIVE SAMPLING DEVICE FOR OBTAINING REPRESENTATIVE FUEL SAMPLES.

INTRODUCTION

Obtaining a representative sample from each bunkering is an essential part of the fuel management procedure onboard your vessel(s). Taking a continuous drip sample that is representative of the complete bunkering and acceptable to all parties involved requires the use of appropriate equipment. The reliability of the fuel quality test results in subsequent analysis is dependent upon the drawing of representative samples and following the correct sampling procedures.

MARPOL 73/78 Annex VI Regulations for the Prevention of Air Pollution requires bunker fuel samples to be drawn continuously throughout the bunker delivery period at the receiving ship's bunker manifold inlet. Our line sampler is fully compliant with MARPOL 73/78 Annex VI and has proven itself over many years as a tamper-evident, reliable and cost effective sampling device for obtaining representative fuel samples. Our valued customers appreciate its robust design and reliability.



TYPES OF VPS LINE SAMPLERS

VPS has been actively engaged in the continuous quality improvement of its sampling equipment, drawing on years of experience in the fuel management business. Various types of samplers and accessories have been developed to meet the specific needs of vessels.

i) Standard Model DLS-003

The most commonly used line sampler. This is supplied with a complete range of accessories.

- Sampling flange
- Sampling probe assembly complete with needle valve, security cap, teflon cap and a "movable" stainless steel cap which spins freely, thereby making it easier to attach and detach cubitainers from the line sampler.
- Non-asbestos gaskets
- Cubitainers
- Bolts and nuts according to the size of the sampler

ii) Enhanced Model DLS-004

The Enhanced Model Line Sampler provides more flexibility. It is supplied with the following accessories in addition to those listed under the Standard Model DLS-003.

- Pressure gauge. This is to indicate the pressure in the bunker manifold to avoid oil spills. Fluctuation of the pressure gauge readings can be an indication of any "cappuccino" bunkering activities.
- Flexible hose with drain valve. This can also be used for the collection of spot sample if required.
- Ball valve. This shut off valve is to isolate the pressure gauge for maintenance purposes.

These additional accessories can be fitted on our standard model DLS003 and distillate model DLS005 without any modification and they can be ordered separately.

iii) Distillate Model DLS-005

Adjusting the flow rate of a distillate fuel using the needle valve of a normal line sampler can be a very difficult task.

To solve this problem, VPS has developed an improved design distillate sampler which incorporates a needle valve with a relatively smaller outlet and finer threaded stem. This permits precise adjustment and control of flow passing through the valve.

This design is a better choice for sampling distillate fuel. It can be supplied with either the standard or Enhanced model features.

iv) Quick Coupler

For vessels that are already using the VPS Line Sampler with the "fixed" cap design, we would like to introduce our Quick Coupler, which reduces the risk of losing or contaminating valuable sample material. A cleaner bunkering station can also be achieved. Designed exclusively for VPS line samplers, the quick coupler enables the cubitainer to be easily attached to any VPS Line Sampler, with virtually no need for any moving parts or rotation. Attaching and detaching is as easy as click-engage-secure, much in the same manner as a high pressure air hose.

v) Angular Line Sampler

To meet the different bunker line requirements of various vessels, a customized angular sampler with 90 degree and 45 degree elbow probes can be fabricated to fit the required angle on the vertical pipeline.

BENEFITS OF VPS LINE SAMPLERS

- It's a continuous drip sampling device, for taking a representative sample throughout the bunker delivery period.
- The sampler is manufactured from stainless steel 304.
- It's a uni-directional sampler i.e. a representative sample can be collected when it is installed with the perforated probe facing the direction of the bunker flow. All samplers have an ARROW mark engraved on the sampler flange circumference to indicate position of perforated holes.
- Both tamper-proof and weather-proof, it is specially custom made to fit within the PCD of flanges to ANSI, DIN, and JIS international pipe standards.
- Custom-made samplers can be ordered if the vessel's bunker manifold flange sizes are different from the standard sizes.
- It is lightweight and very easy to install.
- Gaskets are included and made of non-asbestos material and are suitable for high temperature and high pressure.
- There may be occasions when drawing samples using the Line Sampler which may be affected by vacuum. Usually this occurs where the larger size of the ship manifold with high free board is connected to a smaller barge supply line. This vacuum problem can be dealt with by fitting a 'reducer pipe' at the ship manifold or by drawing the sample from another suitable location (example: from the bunker tanker).
- Minimal maintenance required.

MAINTENANCE

- It is necessary to keep the sampling probe in clean condition to avoid sticking of the needle valve and contamination of the sample taken.
- Most ships have two samplers for sampling distillates [MGO/ MDO] and residues [HFO] separately.
- If line sampler is used for sampling distillates only, the sampler requires minimal maintenance. Use clean, dry working air of 7 to 8 bars to clean and blow the probe before and after every sampling. However, for sampling HFO, the sampler should be removed from the manifold and washed in a distillate bath. Thereafter, use clean, dry working air of 7 to 8 bars to clean the sampling probe. In cold weather, low pressure steam may be required to clean the probe. Remember to remove the protective Teflon thread cap, before using pressurized steam or air.
- If the sampling probe is choked and cannot be cleaned, dismantling the probe from the sampler flange, for cleaning, may be required.
- After cleaning, use Teflon threading tape and carefully refit the probe, taking care of the fine fitting threads.
- If the sampler is kept fitted on the bunker manifold, it is advisable to protect it from the weather.
- Always use new gaskets for installing the Line Sampler on the bunker manifold and keep a proper record of the maintenance.

ORDERING OF LINE SAMPLER

To order VPS line sample(s), please download from www.v-p-s.com and complete the 'Line Sampler Form' and email it to logistic@v-p-s.com. We will contact you upon receiving your order.

Line sampler order form
http://www.v-p-s.com/
brochures-downloads.html

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