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Date:	Our reference:	Your reference:
2014-02-25	14-024454	2013-12-10

Verification of Compliance with EPA / VGP 2013 for stern tube seals that eliminate "oil to sea" interface

Dear Sir or Madam,

We confirm receipt of your application for verification of compliance.

In respect of your application and our role as confirming party we explicitly refer to the explanatory notes of EPA as per e-mail of 2014-02-06, which we received in copy. In accordance to the explanations we understand DNV-GL as a body qualified adequately to carry out a "third party verification", since we have both the theoretical expertise and experience in analysing whether a sealing arrangement will not leak under normal operational conditions as well as the infrastructure to follow up during the recommended life time of this system. Latter provided that the operator / manager of a vessel as well as service personal of makers will report abnormal operation immediately, so far not already detected and analysed during the scheduled and mandatory ship 's surveys.

We append to this letter a copy of your statement / application registered under our ref. no. 14-024454.

Additionally to your appended statement / confirmation we refer to the following documentation:

- The relevant drawings for the Airspace type sealing as explicitly referred to in our type approval GL No. 47777-03 HH. No "Airspace" types mentioned in the type approval are excluded.
- Documentation of the monitoring, control and oil supply system as presented and described within the type approval procedure and the SKF Blohm & Voss Presentation for EPA and GL.
- Multiple e-mail exchanges between DNV-GL, SKF Blohm & Voss and EPA, including some interpretations of EPA concerning VGP 2013 in reference to application of EAL 's and "oil to sea interface" as well as the expected role of DNV-GL for judgment of detailed technical design matters in view of meeting VGP 2013 requirements.

Please note that this process of confirmation for the a.m. sealing type is carried out by DNV-GL in order to assess compliance with EPA 's VGP requirements and explanation of what may or may not constitute an "oil-to sea" interface in the role as a qualified third party. EPA may alter or revise this classification, based on further investigations or other experiences.

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The Airspace sealing in your application includes a void space between the multiple seals to the oil and to seawater side with actively controlled pressure distribution between the chambers. Under normal operation only small quantities of emulsion will build up in this void space. This residual quantity is drained to a controlled bilge within the vessel, thus making oil loss from the oil chambers and the air controlled chamber to the seawater side under design conditions impossible. Oil loss in damaged condition e.g. external damage of common parts such as chrome steel liner may not be excluded and might be considered a violation of VGP requirements for EAL use. DNV-GL 's confirmation is related to normal design operation and presumes proper maintenance by the crew, supported by the built-in control system.

The DNV-GL confirmation is based on a.m. design features making leakage or spilling of oil to the sea under normal operating conditions unfeasible. In accordance with VGP 2013 and relevant EAP interpretations of same, the sealing device may not be classified as an "oil to sea" interface and therefore application of EAL 's is not mandatory.

The appended application of SKF Blohm & Voss under GL ref. no. 14-024454 may only be presented or distributed by this same company in combination with this letter and the explanatory remarks as above. The confirmation refers only to original supplied products by SKF Blohm & Voss since the back ground type approval is exclusively dedicated to this maker and the addressed production facilities.

Should you have any further queries on this matter, please do not hesitate to contact us using the following DNV-GL Reference No. 14-024454/Sid.

Yours faithfully,

for DNV-GL SE



i.V. Dr. Dimitris Sideris



i.A. Dipl.-Ing. Stanislav Avanesov



14.02.2014

U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW, MC 4203M
Washington, D.C. 20460
United States

GL Reference Number	
2014-02-25	14-024454
	SID

**Statement for Simplex Airspace Seal System to the U.S. EPA
Vessel General Permit with effect from 19th December 2013**

Dear Sir or Madam,

Under the VGP 2013 with effect of 19th of December 2013 all oil-to-sea interfaces of vessels operating in U.S. coastal waters must use Environmental Acceptable Lubricants (EALs) unless technically infeasible. One of the specific regulated discharges of the oil-to-sea interfaces is the stern tube system.

As an alternative solution special designs of environmental friendly shaft seals with a void space between oil and water, thus avoiding any oil pollution during normal operation, may be applied.

The Simplex Airspace Seal sealing system with a dedicated void space ("Airspace") allows a complete separation of seawater and stern tube oil and is therefore certified as a non-pollution seal.

The system is subject to proper and regular maintenance by crew, which is prerequisite to eliminate completely and permanently oil drips or leakage into surrounding waters.

For the purpose of Classification Society certification, the "Non Pollution" means that seawater intrusion to the stern tube and contamination of the seawater by stern tube oil is excluded by design under normal operating conditions. This is accomplished by the functioning of the seawater lubricated sealing rings in interaction with the void space and the closed air fluid drain which drains all fluids to inboard. The described sealing system, supported by a failsafe alarm and event log monitor, ceases to be an oil to water interface.



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Statement for Simplex Airspace Seal System to the U.S. EPA

An overall system is reviewed and verified by Germanischer Lloyd and is referring to the Approval Certificate (GL No.: 47 777 03 HH).


All relevant SKF Blohm + Voss Simplex Airspace seal systems covered by the type approval (GL No.: 47 777 03 HH) are regarded as compliant to VGP 2013 by not being an oil-to-sea interface and therefore, EAL application would not be mandatorily required.

Yours faithfully,
SKF Blohm + Voss Industries GmbH



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