



# NIPPON KAIJI KYOKAI

## 鑑定書

No.: KC18YH0223-J

日付: 2018年3月28日

日本油化工業株式会社の依頼により、本会検査員は、2018年3月13日～26日、一般社団法人日本海事検定協会の試験場に於いて、添付の試験方案に従い下記製品による燃料油の潤滑性の改善効果の検証試験に立会い、以下のとおりであった事を確認した。

製品種類: 燃料油添加剤 (潤滑性改善剤)

製品名: Yunic 750LS-F

製造者: 日本油化工業株式会社

1. 試験方案及び試験手順: 添付の試験方案による。
2. 供試燃料油の一般性状: 添付の供試燃料油の一般性状報告書による。
3. 試験結果:

Yunic 750LS-F 添加率 供試燃料油	無添加	添加 1/5000	添加 1/2500
	HFRR摩耗痕径 [ $\mu\text{m}$ ]		
LSGO A	720	450	400
LSGO B	600	460	420
LSGO C	710	470	400

\* “LSGO”はLow Sulphur Gas Oilの略。

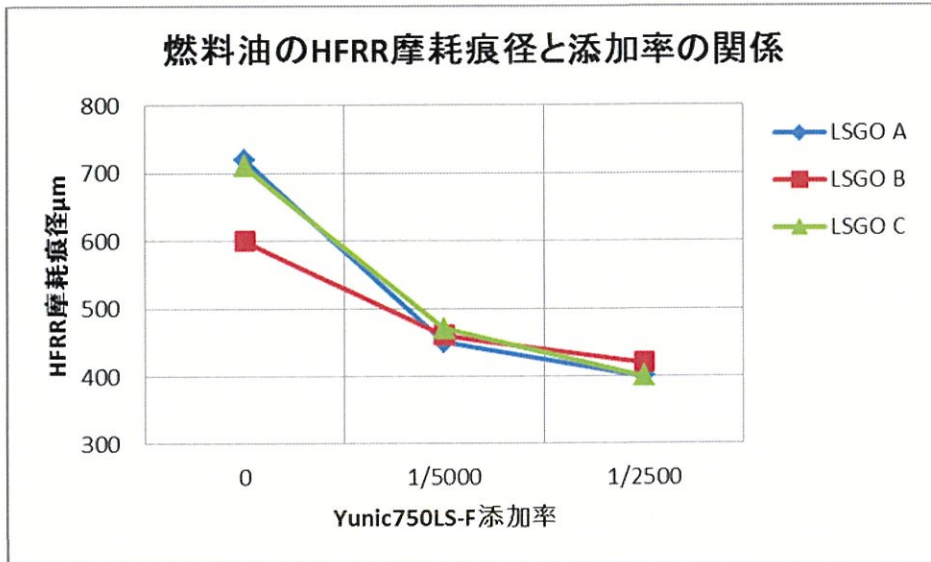
\* “HFRR”はHigh Frequency Reciprocating Rigの略。

上記試験結果は、試験方案及び試験手順に従い確認された。

供試燃料油に燃料油添加剤 Yunic 750LS-Fを添加することにより、潤滑性の評価項目HFRR摩耗痕径に、潤滑性改善剤としての効果による、数値の変化が認められた。



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上記につき鑑定書を発行の上、証明する。

  
 ( S.KUSUHARA )  
 一般財団法人 日本海事協会 検査員



- 添付: 1. 試験結果  
 2. 一般社団法人 日本海事検定協会発行 供試燃料油の一般性状報告書  
 3. 燃料油添加剤Yunic 750LS-Fの検証試験方案



# NIPPON KAIJI KYOKAI

## Statement of Fact

No.KC18YH0223-E

Date: 28 March 2018

THIS IS TO CERTIFY that the undersigned surveyor confirmed the followings at the request of Messrs. NIPPON YUKA KOGYO CO., LTD. on 13-26 March 2018, in order to verify the improving performances for lubricity of fuel oils by below product in accordance with as per attached test procedure at the laboratory of NIPPON KAIJI KENTEI KYOKAI;

Product type: Fuel oil additive (Lubricity improver)  
 Product name: Yunic 750LS-F  
 Manufacturer: NIPPON YUKA KOGYO CO., LTD.

1. Test procedure and method: Refer to attached test procedure
2. General properties of test fuel oils: Refer to attached report of general properties of test fuel oils
3. Results of tests:

Test fuel oils	Yunic 750LS-F Dosing rate	Without additive	With additive 1/5000	With additive 1/2500
	Wear scar diameter(WSD) by HFRR test [ $\mu\text{m}$ ]			
LSGO A		720	450	400
LSGO B		600	460	420
LSGO C		710	470	400

\* "LSGO" means Low Sulphur Gas Oil.

\* "HFRR" means High Frequency Reciprocating Rig .

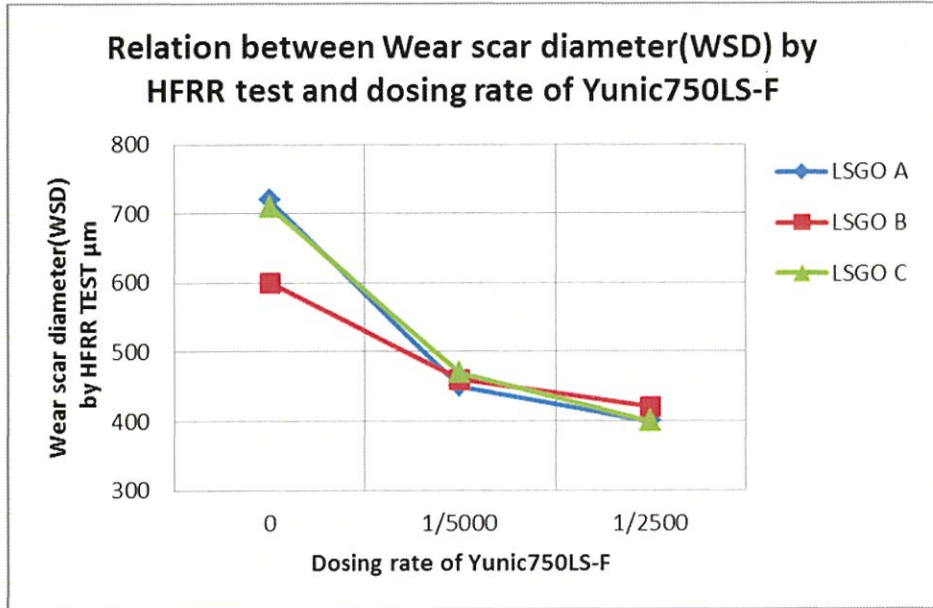
Above mentioned inspection test results are confirmed in accordance with test procedure and method.

By dosing fuel oil additive, Yunic 750LS-F, to test fuel oils, it was confirmed that numerical value of wear scar diameter(WSD) by HFRR test as evaluation items of lubricity property was changed due to the effect as a lubricity improver.


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# NIPPON KAIJI KYOKAI



Therefore this Statement of Fact has been issued.

  
 ( S. KUSUHARA )  
 Surveyor to Nippon Kaiji Kyokai

- Attach:
1. Inspection test results
  2. Report of general properties of test fuel oils issued by NIPPON KAIJI KENTEI KYOKAI
  3. Test procedure for verification test of fuel oil additive “Yunic 750LS-F”

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