





Handled by K Juoperi Reference

NoL Q8 Mozart.doc

Date

02 September 2016

Revision

Page 1 (3)

Kuwait Petroleum Research & Technology B.V.

Att: Mr. Albert de Bont

NO OBJECTION LETTER: Q8 MOZART TM SERIES LUBRICATING OILS

Dear Sir.

The Q8 Mozart TM 55 SAE 40 lubricating oil has been tested according to Wärtsilä's lubricating oil validation procedure. Based on the results of the engine inspection and lubricating oil analyses, Wärtsilä has no objection to the use of the following Kuwait Petroleum products:

Product	SAE grade	Base Number	Fuel category, ISO 8217:2012(E)
Q8 Mozart TM 30 SAE 30	30	30	ISO-F-DMX, DMA, DMZ, DMB,
			ISO-F-RMA 10 – RMK 700, CRO *)
Q8 Mozart TM 30 SAE 40	40	30	ISO-F-DMX, DMA, DMZ, DMB,
			ISO-F-RMA 10 – RMK 700, CRO *)
Q8 Mozart TM 40 SAE 30	30	40	ISO-F-RMA 10 – RMK 700, CRO *)
Q8 Mozart TM 40 SAE 40	40	40	ISO-F-RMA 10 – RMK 700, CRO *)
Q8 Mozart TM 55 SAE 40	40	55	ISO-F-RMA 10 – RMK 700, CRO *)

^{*)} CRO stands for crude oil, for which fuel quality an internal fuel specification is released.

The statement is valid for the engine types Wärtsilä[®] Vasa 22 / 22/26, Wärtsilä[®] Vasa 32 / 32LN, Wärtsilä[®] 20, Wärtsilä[®] 26, Wärtsilä[®] 32, Wärtsilä[®] 38, Wärtsilä[®] 46, Wärtsilä[®] 46F, Wärtsilä[®] 64, Wärtsilä[®] 20DF, Wärtsilä[®] 32DF Wärtsilä[®] 34DF, Wärtsilä[®] 50DF and Sulzer[®] Z40 / ZA40 / ZA40S provided that fuel quality also fulfils the fuel specifications of Wärtsilä and that the engine type specific lubrication requirements are taken into account.

Instructions for other older engine types manufactured by Wärtsilä can be requested from Wärtsilä Services units being in response of a particular engine type in question.



Wärtsilä Finland Oy

Marine Solutions / Engines Technology

Handled by K Juoperi Reference

NoL Q8 Mozart.doc

Date

02 September 2016

Revision

Page 2 (3)

Use of SAE 30 lubricating oils is allowed only in the engine types Wärtsilä® Vasa 22 / 22/26 and Wärtsilä® Vasa 32 / 32LN. In these engine types the suitability of SAE 40 grade lubricating oils depends on the capacity of the lubricating oil cooler used in the installation.

In the engine types Wärtsilä® Vasa 32, Wärtsilä® 20, Wärtsilä® 26, Wärtsilä® 32, Wärtsilä® 38, Wärtsilä® 46, Wärtsilä® 46F and Wärtsilä® 64 the use of BN 50-55 lubricants in heavy fuel installations is recommended in the first place, especially if fuel sulphur content is above 2,0 % mass. BN 40 lubricants can be used as well as if experience shows that the lubricating oil BN equilibrium remains at an acceptable level. BN 30 lubricants are recommended to be used only in special cases. Concerning the engine type Sulzer Z40 / ZA40 / ZA40S the use of BN 50-55 lubricating oils is recommended only in the engines being equipped with piston skirt lubrication and having the anti-polishing rings installed.

In the first place on distillate fuel operation BN 10 - 20 lubricating oils are recommended to be used, but the use of BN 30 lubricating oils is also allowed.

These lubricating oils will be included in Wärtsilä's list of lubricating oils having passed Wärtsilä's lubrication oil testing criteria.

Kuwait Petroleum undertakes all responsibility for the performance of the lubricating oils in service of the above mentioned engine types to the exclusion of any liability of any Wärtsilä company belonging to Wärtsilä group. Kuwait Petroleum along with other possible manufacturers and distributors of the products in question shall indemnify, compensate and hold harmless Wärtsilä and companies belonging to Wärtsilä group from and against any claims, damages and losses caused by the lubricating oils in question.

Kuwait Petroleum undertakes to inform the undersigned / responsible representatives of Wärtsilä of any subsequent changes in the formulation of the lubricating oil brands in question.



Wärtsilä Finland Oy

Marine Solutions / Engines Technology

Handled by K Juoperi

Reference

NoL Q8 Mozart.doc

Date

02 September 2016

Revision

Page 3 (3)

Yours faithfully,

Wärtsilä Finland Oy

Marine Solutions / Engines Technology

Kai Juoperi

Manager, Engine Fluids

Stefan Saario

General Manager, Engine Expertise

Stefan Soctio