



SERVICE NOTE

MITSUI ENGINEERING & SHIPBUILDING CO., LTD.
DIESEL TECHNICAL INVESTIGATION GROUP.

Cylinder Lubrication		No. 194	
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		CHECKED	
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ENGINE TYPE	All engine types	DATE	2016.03.25

The use of the suitable cylinder lube oil to the specific engine type and the proper feed rate adjustment based on the actual cylinder condition is important in order to keep the good cylinder condition.

This Service Note provides a general overview of how to choose the cylinder lube oil and feed rate recommendations for different engine types.

1. Choice of Cylinder lube oil

Generally, cylinder oil with low-alkalinity (BN15-BN40) is used for low-sulphur fuel, and cylinder oil with high-alkalinity (BN70-BN100) is used for high-sulphur fuel. It is recommended to use BN100 oil on S60ME Mark7.1 and all Mark8 and newer engines when operating on high-sulphur fuel.

Engine type	S60ME Mark7.1 and Mark8 and newer	Mark7 and previous
Low S fuel (S%<1.5wt%)	BN15~BN40	
HighS fuel (S%>1.5~3.5wt%)	BN100	BN70~BN100
Viscosity grade	SAE50	

Table 1: Choice of Cylinder lube oil

【BN(Base Number)::Alkalinity】

PRIORITY

IMMEDIATELY

AT FIRST OPPORTUNITY

WHEN CONVENIENT

OTHERS

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2. Cylinder lube oil feed rate recommendation

For the MC/MC-C engines, the cylinder lubricating system can be either the Mechanical lubricator (Standard scope of supply) or electronically controlled Alpha lubricator system (Option). For the ME/ME-C/ME-B engines, the Alpha lubricator system is equipped as standard scope of supply.

Feed rate recommendation which is different among the engine types can be found in the following Service Notes.

Engine type (Lubricator type)	Service Note issued on feed rate recommendation
S60ME-C Mark7.1 and ME/ME-C/ME-B/MC/MC-C/ME-GI/ME-LGI <u>Mark8 and newer</u> (Alpha lubricator)	Service Note No.189 Guidance of Cylinder Lubrication for Mark7.1/8 and newer engines
ME/ME-C/ME-B/MC/MC-C <u>Mark7 and previous</u> (Alpha lubricator)	Service Note No.188 Guidance for Cylinder oil consumption in case Alpha ACC for Mark 7 and previous engine
ME/ME-C/ME-B/MC/MC-C <u>Mark7 and previous</u> (Mechanical lubricator and Alpha lubricator without Alpha ACC control)	Service Note No.183 Guidance for Cylinder oil consumption (In case if Alpha ACC control is not applied)

Table 2: Service Note issued on feed rate recommendations

3. Typical Cylinder lube oil brands

Table 3 show the typical cylinder oil brands currently available in the market and which have been used on Mitsui MAN B&W two stroke engines,

Further information can be obtained by contacting the engine builder or the oil supplier.

Oil company	Oil name	Alkalinity (Base Number)
Castrol	Cyltech ACT	16
	Cyltech 40SX	40
	Cyltech 70	70
	Cyltech 80AW	80
	Cyltech 100	100
Chevron	Taro Special HT LF	25
	Taro Special HT LS	40
	Taro Special HT70	70
	Taro Special HT100	100
ExxonMobil	Mobilgard 525	25
	Mobilgard 570	70
	Mobilgard 5100	100
Shell	Alexia S3	25
	Alexia 50	70
	Alexia S5	80
	Alexia S6	100
Total	Talusia LS25	25
	Talusia LS40	40
	Talusia HR70	70
	Talusia Universal 100	100
JX Nippon Oil & Energy	MarineC255	25
	Marine C405	40
	Marine C705	70
	Marine C1005	100
IDEMITSU KOSAN	Daphne Sea master A50N	70
COSMO OIL LUBRICANTS	Cosmo Marine 5070	70
	Cosmo Marine 5100	100
Lukoil	Navigo 40MCL	40
	Navigo 70MCL	70
	Navigo 100MCL	100

Table 3: List of cylinder lube oil