



To whom it may concern

LDF1/DOJA/28544-2013

5<sup>th</sup> September 2013

## Optimal cylinder lubrication oil in MAN B&W Two Stroke Diesel Engines

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Dear Madams and Sirs,

Cylinder lubrication and lubricants are important issues in connections with operation of MAN B&W two-stroke engines. As designer and developer of these engines, we have to give our best recommendations and guidelines to end users regarding these issues.

As you know, inspections of newer engine types in service have shown a high corrosive level. We find increased wear of cylinder liners and piston rings and exhaustion of cylinder lube oil (CLO). The CLO exhaustion is shown by very low residual BN in the used cylinder oil (drain oil).

Experience has shown that the use of high-BN cylinder lube oils (higher than 70 BN) is an effective measure against the severe cold corrosion. This has made us to introduce 100 BN CLO as our design basis for engine types mark 8.2 and newer.

### Updated design basis for Cylinder Lube Oil (CLO)

- For engines operating on distillates and LNG:  
≤ 40 BN CLO, SAE 50
- For previous engine types operating on heavy fuel:  
70 BN CLO, SAE 50
- For newer engine types (mark 8.2 and newer)  
operating on heavy fuel:  
100 BN CLO, SAE 50

HEAD OFFICE (& postal address)  
MAN Diesel & Turbo  
Teglhølmegade 41  
2450 Copenhagen SV  
Denmark  
Phone: +45 33 85 11 00  
Fax: +45 33 85 10 30  
mandiesel-cph@mandieselturbo.com  
www.mandieselturbo.com

PrimeServ  
Teglhølmegade 41  
2450 Copenhagen SV  
Denmark  
Phone: +45 33 85 11 00  
Fax: +45 33 85 10 49  
PrimeServ-cph@mandieselturbo.com

PRODUCTION  
Teglhølmegade 35  
2450 Copenhagen SV  
Denmark  
Phone: +45 33 85 11 00  
Fax: +45 33 85 10 17  
manufacturing-dk@mandieselturbo.com

FORWARDING & RECEIVING  
Teglhølmegade 35  
2450 Copenhagen SV  
Denmark  
Phone: +45 33 85 11 00  
Fax: +45 33 85 10 16  
shipping-cph@mandieselturbo.com

MAN Diesel & Turbo  
Branch of MAN Diesel & Turbo SE,  
Germany  
CVR No.: 31611792  
Head office: Teglhølmegade 41  
2450 Copenhagen SV, Denmark  
German Reg.No.: HRB 22056  
Amtsgericht Augsburg



This change will result in the following:

1. An update to the Service Letter SL2013-571 is under preparation.
2. Feed rate- and ACC- (**A**daptive **C**LO **C**ontrol) guidelines will be based on the actual BN levels according to the design basis.
3. We do not object to the usage of CLO's with BN levels between 70 and 100.

Enclosed are:

- Our newest Circular Letter, CL11868-2013: *Increase of Cylinder Oil Dosage or Increase of Cylinder Oil BN to Reduce Corrosive Cylinder Wear.*  
This Circular Letter has been forwarded to Owners and Operators of MAN B&W two-stroke marine diesel engines of the listed engine types.
- Our latest Service Letter, SL2013-571: *Cylinder Lubrication Update, Adjusting the ACC factor in service.*  
The Service Letters are forwarded to all Owners and Operators of MAN B&W two-stroke marine diesel engines of all engine types.

Only the full and complete version of this letter may be reproduced and/or displayed by the receiver.

Best regards,  
MAN Diesel & Turbo

A handwritten signature in blue ink, appearing to read "Dorthe Jacobsen", with a long horizontal flourish extending to the right.

Dorthe Jacobsen