ABB Turbocharging Tekomar CYLUBE
Upgrade for mechanical cylinder lubricators

With Tekomar CYLUBE it’s possible to upgrade your mechanical cylinder lubricators with an engine load, lube oil BN and fuel oil S-dependent system. Just enter the specifications of fuel and lube oil and the lubricators will know what feed-rate is best – at any load.

No more over-lubrication, and no under-lubrication either. And the best is yet to come: you can control the settings of your cylinder lubrication system directly from the control panel in the ECR, and set the desired feed-rate in g/kWh without touching the setting screw.

Characteristics
• Upgrades for mechanical cylinder lubricators of MAN MC(-C), Mitsubishi UEC and Wärtsilä RTA (with SIP lubrication)*
• Typically saves more than 30 percent of cylinder lube oil cost without compromise on cylinder condition.
• Installation done during normal service. No hidden off-hire cost.
• Required upgrade for IMO III low Sulphur fuel to avoid over-lubrication.
• Tekomar CYLUBE is offered at attractive package prices with material, delivery, installation and commissioning included.

* Tekomar CYLUBE is also available for Wärtsilä RTA engines with CLU3 cylinder lubrication systems, making the lubrication feed-rate settings easy and accurate

<table>
<thead>
<tr>
<th>Feature</th>
<th>CYLUBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of application</td>
<td>Upgrade any lubricators (HJ, Atlas, etc)</td>
</tr>
<tr>
<td>Min. feed rate (dep. on cylinder condition and makers guideline)</td>
<td>0.7 g/kWh</td>
</tr>
<tr>
<td>Timed lubrication</td>
<td>Mechanical</td>
</tr>
<tr>
<td>Injection frequency</td>
<td>Every revolution</td>
</tr>
<tr>
<td>Adjustment of feed rate</td>
<td>Directly on panel in ECR</td>
</tr>
<tr>
<td>Redundancy</td>
<td>Built-in – shift to rpm control</td>
</tr>
<tr>
<td>Installation during normal operation</td>
<td>Yes</td>
</tr>
<tr>
<td>Maintenance cost</td>
<td>None</td>
</tr>
<tr>
<td>Cost of solution</td>
<td>Low</td>
</tr>
</tbody>
</table>
03 Remote control in engine control room for accurate feed rate settings

Engine control room

Control panel

- 24 V DC power supply from RCS system (50 W)
- Load index
- M:E power
- Act. feed rate
- M:E speed
- M:E speed signal

Engine room

Lubricator
Variable-offset shaft
Electronically controlled actuator
Speed pickup for engine/lubricator speed signal

Mechanical concept
With Tekomar CYLUBE M, the original lubricator remains untouched. It preserves precise timing and injection at every single revolution.

Here’s how it works: Instead of the manual handle an electronically controlled actuator is engaged on the offset shaft. An angle transmitter and speed sensor are used for power estimation. Both are connected to the cylinder lubrication controller which computes the actuator position from the input and user-defined settings.

Now, the feed rate can be set accurately based on load-dependent lubrication characteristics, which is the standard for today’s engine designs.

User input is carried out using the Lubricator Control Panel in the ECR – making cylinder lubrication visible.

The controller you always wanted to have
The innovative lubrication controller, mounted conveniently in the engine control room, shows you the relevant information. You can adjust the settings and switch from settings to graphs by clicking on the corresponding buttons at the side.

The interface is so intuitive that it takes no time to understand and manage it.
- Power calculated from FI × rpm
- Minimum feed-rate setting
- ACC factor is automatically calculated and applied based on S % and BN setting
- Running-in mode
- Basic feed-rate based on S, BN and/or running-in step
- Continuous full control due to overview of all relevant values

As you control the actuators separately, it is possible to have individual settings for each lubricator.
