BUS FLEET COMPANY SAVES US$188,200 BY USING SHELL RIMULA R6 LM* AND SHELL RIMULA R6 LME*
TOTAL REPORTED ANNUAL CUSTOMER SAVING US$188,200

COMPANY: Berliner Verkehrsbetriebe
COUNTRY: Germany
APPLICATION: Heavy-duty diesel engines
SAVING: US$188,200 total reported annual customer saving
KEY EDGE: Shell Rimula R6 LM 10W-40, Shell Rimula R6 LME 5W-30

Berliner Verkehrsbetriebe (BVG) is Berlin’s public transport authority and the largest bus company in Germany. BVG was one of the first companies to introduce diesel particulate filters (DPF).

Maintenance costs to remove soot and ash residues from DPFs are significant. BVG was looking for a lubricant that would provide increased protection against deposits in order to lengthen the intervals between DPF clean-ups, so it approached Shell for a solution.

To meet the challenge, Shell recommended a trial using Shell Rimula R6 LM and Shell Rimula R6 LME. Shell worked closely with BVG on a five-year trial using the two fully synthetic and low-SAPS technology oils in 15 buses. During the trial, the DPFs were tested for deposits and oil samples were tested for evidence of wear.

The results of the trial showed DPF cleaning intervals that were 50% longer, and that these products provided excellent wear protection, even at the extended oil-drain intervals. The company reported significant cost savings calculated at US$188,200 a year.

*Shell Rimula R6 LM and Shell Rimula R6 LME are the new names for the Shell lubricants formerly known as Shell Rimula Signia.
Shell Rimula R6 LM energised protection oils use proven combinations of additives that react to the needs of your engine. They feature an enhanced acid-control system for added protection and long life. Each dedicated additive releases its protective energy when needed to give reliable and consistent protection against deposits and wear.

Applications
Shell Rimula R6 LM engine oils are
- suitable for use in many on-highway heavy-duty applications. Meeting the requirements of many US, European and Japanese engine makers, they are particularly suited for a wide range of trucking and public transportation applications in modern low-emission vehicles, in particular, fleets with mixed brands of engines and ages of vehicles.
- approved for use in heavy-duty compressed natural gas-powered engines from Mercedes-Benz, MAN and Volvo, which makes it particularly suitable for use in public transportation fleets with mixed diesel- and gas-powered vehicles.

Performance features and benefits
- Versatile protection. Shell Rimula R6 LM can help contribute to efficient transport operations.
- Low emissions. Shell Rimula R6 LM is catalyst and particulate filter compatible to help maintain performance and the life of the vehicle emission system.
- Maintenance saving. Shell Rimula R6 LM’s long drain intervals and versatility to help manage maintenance and inventory costs, and reduce waste oil.

Specifications and approvals
Shell Rimula R6 LM exceeds the performance requirements of industry specifications such as API CI-4, ACEA E6 and E7, and is particularly recommended for vehicles fitted with DPFs.

Complementary products

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Lubricants</th>
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<tr>
<td>Gear oils</td>
<td>Shell Spirax S2 G, Shell Spirax S3 G, Shell Spirax S6 GXME</td>
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<tr>
<td>Axle oils</td>
<td>Shell Spirax S2 A, Shell Spirax S3 AX, Shell Spirax S6 AXME</td>
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<td>Transmission oils</td>
<td>Shell Spirax S4 ATF HDX, Shell Spirax S6 ATF VM, Shell Spirax S6 ATF LM</td>
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<td>Greases</td>
<td>Shell Gadus S2 V220, Shell Gadus S2 V220AC, Shell Gadus S3 V220C, Shell Gadus S3 V460D, Shell Gadus S4 V460C</td>
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The extensive field testing on Shell Rimula R6 LM and Shell Rimula R6 LME showed the benefits to BVG’s operation from these lubricants were 50% longer intervals between DPF clean-ups and longer oil-drain intervals, along with excellent wear protection.

Shell Rimula R6 LM and Shell Rimula R6 LME helped BVG to address the challenge of high soot and ash residues in DPFs. Through extended oil-drain intervals and reduced DPF maintenance costs, the total customer saving is reported to be US$188,200 a year.

*The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending on, for example, the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.*