

Shell Marine

SHELL GADINIA S3

Simplifying operational complexity



At Shell Marine, we understand the marine industry's challenges because Shell is also a fleet operator. We are constantly developing products and services for customers and engine manufacturers alike that help to address the challenges you encounter while helping you to remain competitive in the face of rising operating costs and uncertain demand.

Shell Gadinia S3, our latest trunk piston engine oil, has been developed to reduce oil consumption in modern engines burning distillate fuels by controlling liner lacquering. It is also versatile, thereby helping to simplify operations through its wide range of non-engine shipboard applications.

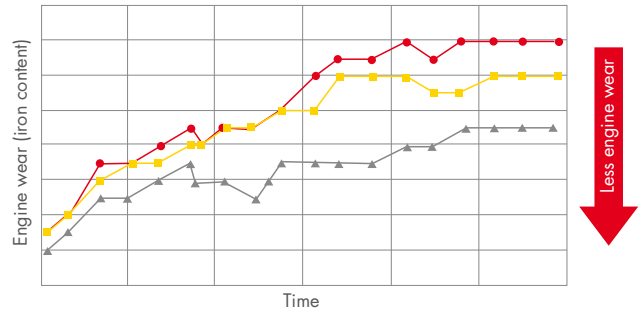
Rising pressures

The latest engines that burn distillate fuels are designed to be fuel-efficient. This gives them higher brake mean effective pressures and operating temperatures, which can severely reduce oil life and lead to higher costs associated with more-frequent oil changes and/or liner lacquering and wear.

Better protection

Shell Gadinia S3 offers excellent wear protection and controls liner lacquering for improved oil consumption. Engine deposits can increase the frequency of maintenance and, ultimately, limit vessel availability. The detergent and dispersant additive technologies found in Shell Gadinia S3 help to keep your engine clean. They can help to reduce maintenance requirements by offering

- improved cleanliness for pistons, piston undercrowns, piston ring belts and crankcases
- longer filter life
- less fuel pump sticking
- improved lacquer control.



Simplifying operations

With a complete set of non-engine approvals, Shell Gadinia S3 can be used in multiple applications, including stern tubes and gearboxes. This versatility can help to simplify operations, thereby reducing the number of different lubricants that need to be ordered, stored and applied. This is particularly useful for smaller vessels with limited deck space.



THE DEVELOPMENT OF **SHELL GADINIA S3** IS UNDERPINNED BY OUR RIGOROUS SCIENTIFIC UNDERSTANDING OF OIL STRESS.

Main applications

- Highly rated, medium-speed main propulsion and auxiliary trunk-piston marine diesel engines
- Turbochargers, oil-filled stern tubes and variable pitch propellers
- Deck machinery and other marine applications requiring SAE 30 or 40 viscosity oils

Non-engine approvals

Shell Gadinia S3 has a comprehensive set of non-engine approvals, including

- Simplex B&V
- Ortlinghaus
- Stromag
- Reintjes
- Renk, Rheine
- Renk, Augsburg
- Siemens/Flender
- MAN Alpha (meets requirements)
- CLP requirement specification (meets requirements widely)
- VDL requirements specification (meets requirements widely).

Proven technology

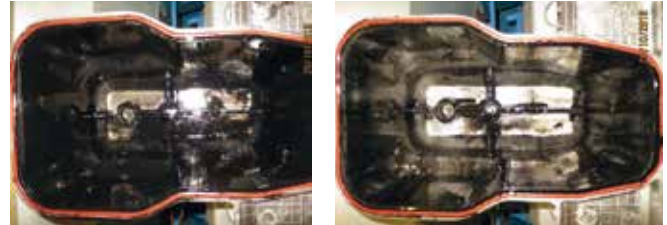
Shell Gadinia S3 has spent almost 40,000 hours (nearly three years) in field trials.

Extensive engine trials at the Shell Marine and Power Innovation Centre in Hamburg, Germany, have confirmed that Shell Gadinia S3

avoids sludge formation and improves piston and crankcase cleanliness, and thus prevents deposit formation. Shell Gadinia S3 also offers improved detergency compared with previous Shell products.

This performance has been successfully demonstrated in real operations in different engine makes and models, including

- Wärtsilä 8L20
- MAN 8L21
- Caterpillar MaK 8M20
- Bergen Engines C25:33L6A.



PREVIOUS-GENERATION OIL

SHELL GADINIA S3

Cleaner and less wear: This Wärtsilä 8L20 valve cover is visibly cleaner after 12,000 hours with Shell Gadinia S3 compared with the same time with a previous-generation, anti-lacquer Shell Gadinia product. Used-oil wear metal levels are lower too.

TECHNICAL SERVICES

Help to maximise lubricant value with our technical services

Through our technical services, we can recommend the right products for your needs, offer flexible training programmes, help to optimise equipment performance, and analyse and diagnose lubricant-related problems.

We offer a suite of technical service programmes that aim to help you overcome operational complexities and reduce your operating costs.

TECHNICAL SERVICE	SERVICES
Shell LubeAnalyst*	This flexible used-oil analysis service is designed to save you time and money related to equipment failures. It is an early-warning system that aims to give you peace of mind from the knowledge that your equipment and lubricants are working efficiently.
Shell LubeAdvisor	Through this service, we provide a global team of field-based engineers for on-site support, including lubrication surveys, vessel assessments and in-depth technical and application support, as required. Support is also available by phone and email.
Shell LubeCoach	This training programme is designed to help you realise the potential benefits of a fully focused lubrication plan and to get maximum return from your investment with a better qualified team.

FIND OUT MORE

For more information on our products or their applications, please contact your Shell Marine representative or visit www.shell.com/marine.



*Previously known as Shell Rapid Lubricants Analysis

