



Shell Omala S2 GX Plus

High-performing industrial gear oil approved
by SEW-EURODRIVE and Flender

SHELL
LUBRICANT
SOLUTIONS

For 2025 and beyond, we have worked with gearbox manufacturers to create **Shell Omala S2 GX Plus**.
As a versatile, one-for-all gear oil, it helps simplify your lubricant portfolio and cut the time, cost and complexity of managing multiple products.

1995

Shell Omala S2 G
Shell Omala F

2017

Shell Omala S2 GX combined the performance of two proven and trusted products and met or exceeded new original equipment manufacturer (OEM) specifications.

2025 and beyond

In 2025, **Shell Omala S2 GX** was upgraded to **Shell Omala S2 GX Plus**, which delivers enhanced performance and is gaining approvals from multiple leading global gearbox OEMs, including **SEW-EURODRIVE and Flender**.¹



Built for heavy-duty performance, Shell Omala S2 GX Plus protects industrial gearboxes under tough conditions – resisting wear and micropitting while remaining compatible with seals and paint for smooth, reliable operation.

Shell Omala S2 GX Plus key features at a glance:

- Longer oil life
- Enhanced deposit control
- Better filterability²
- Enhanced micropitting and wear protection³
- Improved foam control
- Improved seal and paint compatibility⁴
- Flender and SEW-EURODRIVE approved



¹ Meets the latest leading OEM technical requirements, including those of SEW EURODRIVE, Flender and ZF Industrial.

² Compared with Shell Omala S2 G and competitors from the market, according to Shell internal customised foam test after 5,000 filtration passes.

³ Compared with Shell Omala S2 G, according to Shell internal anti-wear test results.

⁴ Compared with Shell Omala S2 G and Shell Omala S2 GX, according to third-party compatibility test results.

How Shell Omala S2 GX Plus helps to protect your gearbox

Shell Omala S2 GX Plus features

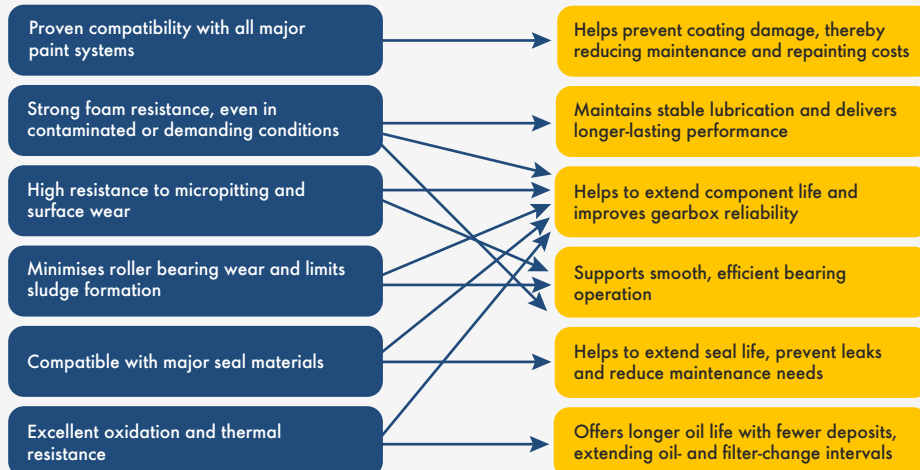


Figure 1: How Shell Omala S2 GX Plus features work together to protect gearboxes.

[Click here to read the expanded description for Figure 1 in the appendix on page 5](#)



Higher reliability in operation through better seal performance shown in extensive dynamic testing⁶

Approximately 40% of gearbox leakages are associated with poor interaction between the radial shaft seal and the lubricant.⁷ Therefore, it is crucial to consider the performance of the gear oil, seal grease (when used), elastomer material, seal design and the shaft surface together.

Shell Omala S2 GX Plus has undergone rigorous SEW dynamic seal compatibility testing⁸, which evaluates real operating conditions under very challenging conditions and with the longest testing duration – rather than relying solely on shorter, less dynamic and static laboratory soak tests. This enables reliable oil seal interaction throughout the gearbox's service life.

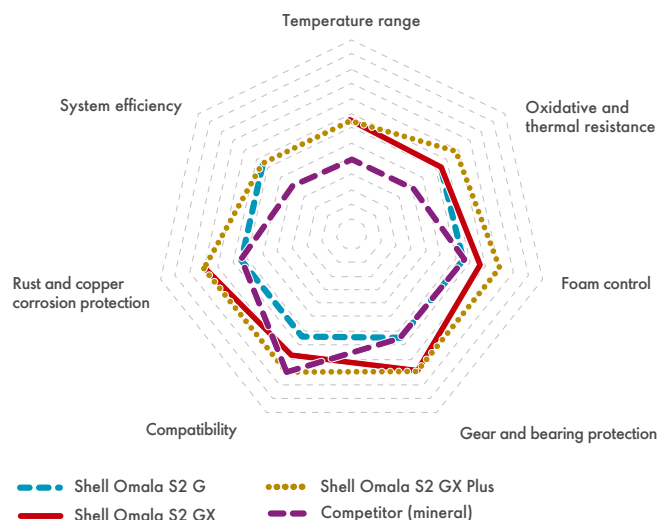


Figure 2: A radar chart comparing relative performance criteria of four Shell Omala gear oils, including Shell Omala S2 GX Plus, and a competitor mineral gear oil.

[Click here to read the expanded description for Figure 2 in the appendix on page 6](#)

⁵ Compared with Shell Omala S2 G and Shell Omala S2 GX, according to Shell internal laboratory test results.

⁶ Compared with Shell Omala S2 G and Shell Omala S2 GX, according to Shell internal laboratory test and third-party OEM approval test results.

⁷ Source: Adler, Matthias, et al. "Understanding the dynamic influences of gear oils and radial shaft seals," Power Transm. Eng. (2018): 30–37. <https://www.powertransmission.com/understanding-the-dynamic-influences-of-gear-oils-and-radial-shaft-seals>

⁸ SEW dynamic seal testing goes beyond simple immersion tests by simulating real gearbox operation, including shaft rotation, pressure variation, temperature cycling and the use of seal grease over extended test durations. This longer, more demanding test evaluates seal elasticity, dimensional stability, resistance to swelling or cracking, and long-term sealing performance under load.

Shell Omala S2 GX Plus: Specifications and approvals⁹

ISO viscosity grade	68	100	150	220	320	460	680	1,000
ISO 12925-1 CKC	Meets	Meets	Meets	Meets	Meets	Meets	Meets	Meets
ISO 12925-1 CKD	Meets	Meets	Meets	Meets	Meets	Meets	-	-
ISO 12925-1 CKSMP	Meets	Meets	Meets	Meets	Meets	Meets	-	-
DIN 51517-3 C LP	Meets	Meets	Meets	Meets	Meets	Meets	Meets	Meets
DIN 51517-4 C LPX	-	Meets	Meets	Meets	Meets	Meets	-	-
ANSI AGMA 9005	Meets	Meets	Meets	Meets	Meets	Meets	Meets	Meets
China National Standard GB-5903 L-CKC	Meets	Meets	Meets	Meets	Meets	Meets	Meets	Meets
China National Standard GB-5903 L-CKD	Meets	Meets	Meets	Meets	Meets	Meets	-	-
AIST (US Steel) Req. No. 224	Meets	Meets	Meets	Meets	Meets	Meets	-	-
Flender	-	Approved	Approved	Approved	Approved	Approved	Approved	-
ZF Industrial	-	Approved	Approved	Approved	Approved	Approved	-	-
SEW-EURODRIVE	-	-	Approved	Approved	Approved	Approved	Approved	Approved

⁹ The table does not list all claims and approvals. If you want to see the full list, please contact Shell's Technical Helpdesk or consult your Shell representative.

Shell Omala S2 GX Plus – all-round performance that protects gearboxes in:

- highly contaminated environments¹⁰
- severe applications¹⁰
- extended-duty applications.¹⁰

Shell
LubeAnalyst

Please use the Shell LubeAnalyst oil condition monitoring service when significant topping-up is required.

¹⁰ Compared with previous Shell Omala S2 products and competitors in the market, according to Shell internal laboratory test results, third-party OEM approval test results and field trials results conducted in different sectors.



Find out more by visiting
www.shell.com/lubricants

Cautionary note: www.shell.com/investors/disclaimer-and-cautionary-note.html



Appendix

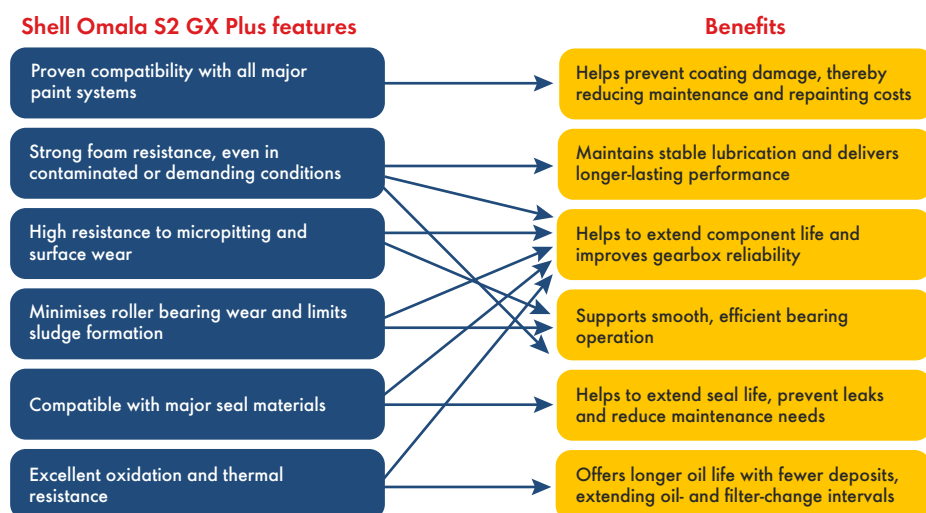


Figure 1 The image is a two-column flow diagram titled “Shell Omala S2 GX Plus features” on the left and “Benefits” on the right. Blue rounded rectangles on the left list six product features, while yellow rounded rectangles on the right list the customer benefits. Arrows connect each feature to one or more benefits, illustrating how the oil properties deliver multiple operational advantages.

The features listed on the left are: proven compatibility with all major paint systems;¹¹ strong foam resistance even in contaminated or demanding conditions;¹² high resistance to micropitting and surface wear;¹³ minimised roller bearing wear with limited sludge formation;¹⁴ compatibility with major seal materials;¹⁵ and excellent oxidation and thermal resistance.¹⁶

The benefits listed on the right include: preventing coating damage and reducing maintenance and repainting costs; maintaining stable lubrication and longer-lasting performance; extending component life and improving gearbox reliability; supporting smooth, efficient bearing operation; extending seal life, preventing leaks, and reducing maintenance needs; and offering longer oil life with fewer deposits, extending oil- and filter-change intervals.

The arrows show many-to-many relationships: for example, wear resistance, foam control, and oxidation stability all contribute to improved reliability and longer oil life, whereas seal compatibility and oxidation resistance together support leak prevention and reduced maintenance. The figure visually demonstrates how Shell Omala S2 GX Plus features work together as a system to protect gearboxes, improve reliability and lower total maintenance effort.

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¹¹ Based on Shell internal and 3rd party lab results according to industrial standards and key OEM specifications.

¹² Compared with Shell Omala S2 GX and other mineral gear oils. Foam control test in the presence of cement contamination (modified ASTM D892 foam test) conducted at Shell internal lab.

¹³ Based on FVA micropitting test, FZG scuffing test and FE8 bearing wear test results conducted at Shell and 3rd party labs.

¹⁴ Based on Four-ball and yellow metal corrosion test (ASTM D130) results conducted at Shell and 3rd party labs.

¹⁵ Based on seal compatibility (Flender) static and dynamic test (ISO 1817, DIN 3761) results conducted at Shell and 3rd party lab.

¹⁶ Based on oxidation stability test (ASTM D2893) results conducted at Shell and 3rd party lab.

Appendix

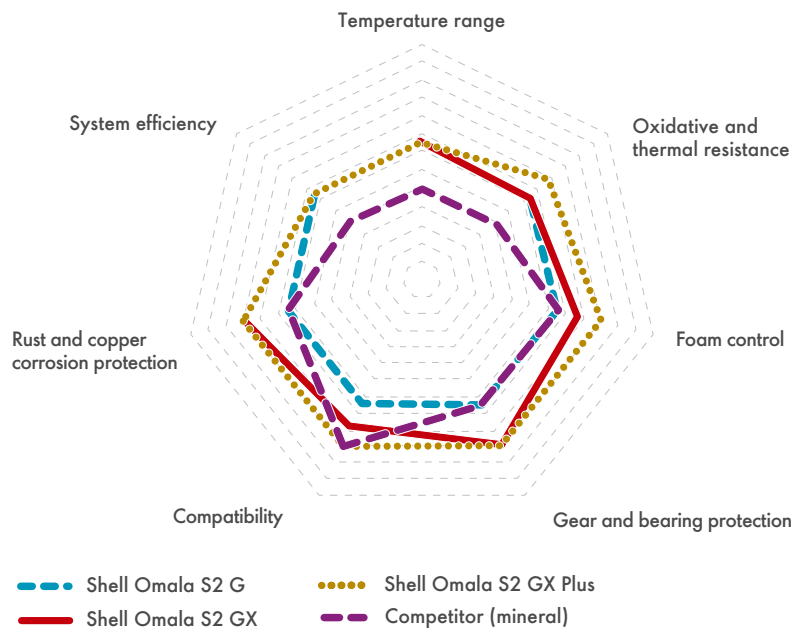


Figure 2 The radar (spider) chart shows the relative performance of Shell Omala S2 GX Plus, Shell Omala S2 GX, Shell Omala S2 G and a competitor mineral gear oil across seven criteria, shown clockwise from the top: temperature range, oxidative and thermal resistance, foam control, gear and bearing protection, compatibility, rust and copper corrosion protection and system efficiency.

The profile of Shell Omala S2 GX Plus is shown by a bold solid red line, Shell Omala S2 GX by a yellow dotted line, Shell Omala S2 G by a blue dashed line and the competitor oil by a purple dashed line. No numerical scale is shown, but relative values increase outward from the centre with faint dashed concentric heptagons indicating increasing performance levels.

The chart shows that the performance of Shell Omala S2 GX Plus equals or surpasses that of the other oils across all seven criteria. Shell Omala S2 GX Plus equals the compatibility performance of the competitor oil and performs moderately better than Shell Omala S2 GX, which is in turn better than Shell Omala S2 G.

The performance of Shell Omala S2 GX Plus is also very strong in foam control, for which this oil performs moderately better than Shell Omala S2 GX and significantly better than Shell Omala S2 G and the competitor oil, and in both gear and bearing protection and rust and copper corrosion protection, for which it equals the performance of Shell Omala S2 GX and performs significantly better than Shell Omala S2 G and the competitor oil.

Shell Omala S2 GX Plus shows moderate performance in system efficiency, temperature range, and oxidative and thermal resistance. For system efficiency and temperature range, Shell Omala S2 GX Plus matches the performance of Shell Omala S2 GX, Shell Omala S2 G and the competitor oil. For oxidative and thermal resistance, it moderately outperforms Shell Omala S2 GX and Shell Omala S2 G, and significantly outperforms the competitor oil.

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