Shell **Omala** ***S4*** *WE*

- Extra protection and life
- Energy saving
- Worm-gear applications

DESIGNED TO MEET CHALLENGES

Every part of your machine or process has been meticulously engineered, so you want to use a lubricant that has been designed to ensure that your equipment is well protected and works efficiently.

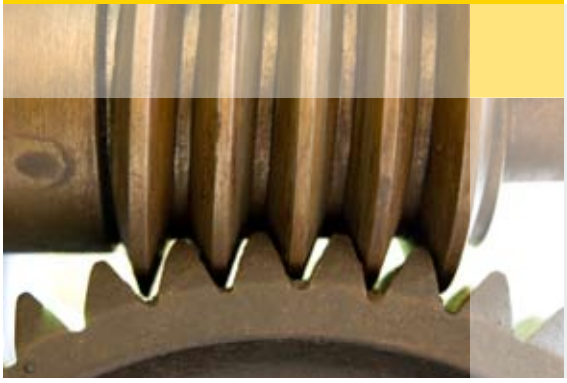
The Shell Omala range of gear oils has been developed to enable equipment operators to select the oil that will deliver optimum value to their operations through

- **wear protection**
- **long oil life**
- **system efficiency.**

Performance at a glance

	Protection	Oil life	System efficiency
Shell **Omala *S4*** *WE* **SYNTHETIC** ■ Extra protection and life ■ Energy saving ■ Worm-gear applications	✓✓✓✓	✓✓✓✓	✓✓✓✓✓
Shell **Omala *S1*** *W* ■ Reliable protection ■ Worm-gear applications	✓	✓	✓

Performance level is a relative indication only.



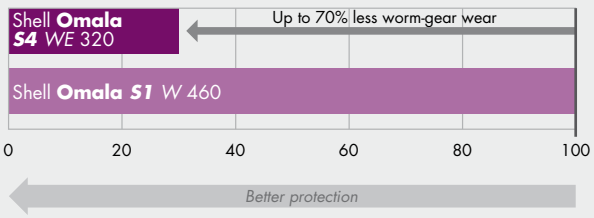
AN ADVANCED, SYNTHETIC GEAR OIL FOR WORM GEARS

Shell Omala S4 WE is Shell's ultimate dedicated worm-gear oil. It is formulated using a synthetic polyalkylene glycol base oil, which is designed to help maximise worm-gear life and efficiency. Real-world applications show that this oil can offer you excellent oil life and wear protection for worm and spur gears, thus helping you to increase productivity and cut maintenance costs. Shell Omala S4 WE is widely recognised and approved by leading equipment manufacturers.

DESIGNED TO PROTECT

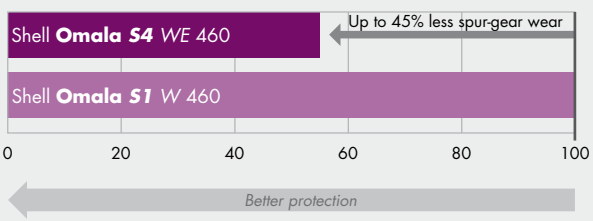
Protecting gears from damage can help to increase service life and maximise your return on investment. Shell Omala S4 WE can help to achieve this by offering

- ***up to 70% less worm-gear wear***
  than Shell Omala S1 W



Backlash wear (% of Shell Omala S1 W 460)
(David Brown Radicon 500-hour wear test)

- ***up to 45% less spur-gear wear***
  than Shell Omala S1 W.

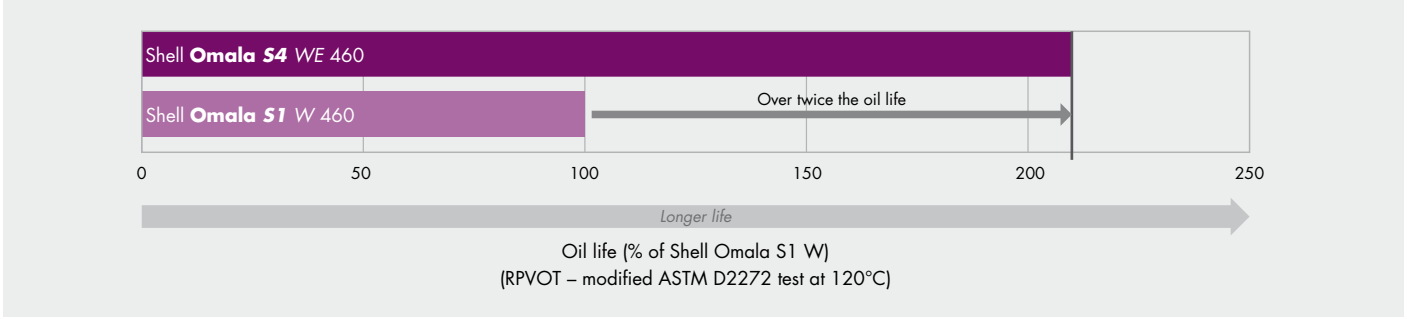


Spur-gear wear (% of Shell Omala S1 W)
(FZG 60-hour wear test, ASTM D4998)

DESIGNED FOR LONG OIL LIFE

Limiting fluid degradation can help to prolong oil life. Shell Omala S4 WE is designed to help you operate for longer without interruption – for reduced maintenance requirements and enhanced productivity. In an industry-standard oil life test, Shell Omala S4 WE has

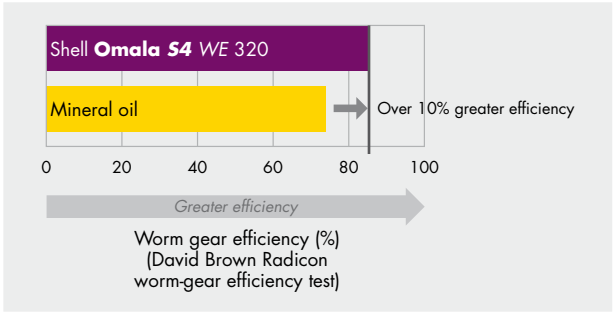
- ***over twice the oil life***
  compared with conventional oils such as Shell Omala S1 W.



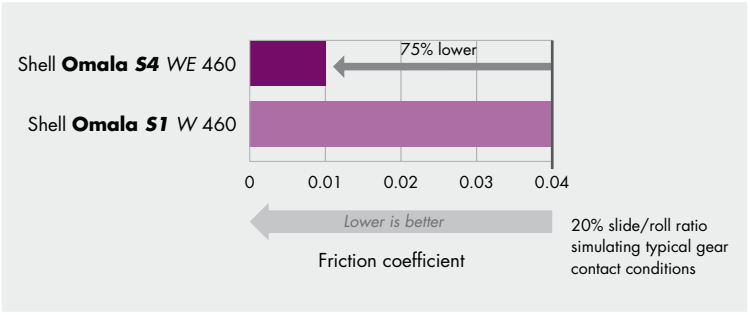
DESIGNED FOR HIGH EFFICIENCY

A gear oil needs to protect and lubricate efficiently. Shell Omala S4 WE is designed to increase productivity by helping equipment to meet or exceed its design capabilities. Shell Omala S4 WE has

- ***over 10% greater worm-gear efficiency***
  than a standard mineral oil



- ***a 75% lower friction coefficient***
  than conventional oils such as Shell Omala S1 W.



SPECIFICATIONS AND APPROVALS

Shell Omala S4 WE meets the requirements of a wide range of industrial bodies and equipment manufacturers, and is available in viscosity grades from ISO 150 to 680.

Claims and approvals	Meets requirements
Fully approved by Bonfiglioli	ANSI/AGMA 9005-E02 (EP)
Fully approved by Flender	David Brown S1.53.105 G
	ISO 12925-1 Type CKE

APPLICATIONS

Industrial worm-drive reduction systems – for use in severe operating conditions such as high load under extreme temperature conditions. Compared with conventional oils, Shell Omala S4 WE can significantly reduce energy loss in worm drives.

Extended life operations – for long-life applications, particularly where exceptional protection is required for inaccessible locations, for example, in wind turbine yaw bearings or where high temperatures or pressures may be encountered

Suitable for bearings and other components in splash-lubricated systems

Contains polyalkylene glycols and is not compatible with mineral oils or many synthetic oils. Contact your Shell representative for changeover procedures.

REAL-WORLD VALUE DELIVERY

Customers around the world are benefiting from switching to Shell Omala S4 WE. For instance:

- one tyre manufacturer extended its oil-drain intervals from three months to three years in curing press gearboxes to increase productivity
- customers operating worm gears, in particular bronze/steel gear sets, have increased gear life by using Shell Omala S4 WE dedicated worm-gear oil
- crane and winch operators have benefited from the superior protection of Shell Omala S4 WE and increased the life of their systems.

FULL PRODUCT AND SERVICE PORTFOLIO

Whatever your needs or application, we can provide a full range of oils and greases, including synthetic, high-performance products and additional services.

For more information, please contact

shell.com/lubricants