



## WORKING WITH INDUSTRY

Construction equipment often needs to operate in remote off-highway locations with a range of climatic conditions, which can put additional demands on the lubricants. To respond to market needs, Shell is continually developing its products to help you reduce operating costs and help keep your equipment working efficiently.

Shell has long-standing relationships with many of the leading equipment manufacturers. Many of these companies deliver their equipment to their customers containing a Shell lubricant as an important component of the machine.

Shell's has over 3,000 cases where its lubricants are approved by or meet the specifications of equipment manufacturers, including

- Caterpillar
- JCB
- Sany
- Volvo,

and component manufacturers, including

- Bosch Rexroth
- Carraro
- ZF Friedrichshafen.

Shell supports the development of new industry performance specifications by working with international organisations such as

- ACEA
- API
- JASO.

## EFFICIENCY FOR YOUR OPERATIONS

Over many years of working with the world's leading construction companies, Shell lubricant experts have developed a deep understanding of your industry challenges. They use this knowledge and experience to create technology-leading products that can deliver clear benefits, which can be demonstrated at your sites.

FOR MORE INFORMATION, PLEASE CONTACT

[shell.com/construction](https://shell.com/construction)

"Shell Lubricants" refers to the various Shell companies engaged in the lubricants business.

<sup>1</sup>Savings reported by individual customers. Actual savings may vary, depending on the application, the current oil used, the maintenance procedures and the condition of the equipment.



**DESIGNED TO DELIVER  
UNDER PRESSURE.  
JUST LIKE OUR  
LUBRICANT SOLUTIONS  
FOR CONSTRUCTION.**

**DESIGNED TO MEET CHALLENGES**



DESIGNED TO CUT COSTS

Equipment breakdown at a construction site can severely compromise your project schedule and prevent your company from earning revenue. In the construction industry, you are constantly striving to meet deadlines, lower operating costs and maximise equipment availability. Whether you need a reliable lubricant supply for remote projects or increased equipment availability, Shell has a wide range of lubricants and services designed to help meet your needs.

These products can help you to reduce your process and equipment ownership costs by providing

- enhanced protection
- extended oil and equipment life
- enhanced efficiency.

DELIVERING VALUE

Using the right lubricants can significantly reduce costs by

- cutting unplanned equipment downtime
- lowering maintenance costs
- increasing equipment life and availability.

TECHNOLOGY WORKING FOR YOU

Shell harnesses technology to deliver value through the creation of solutions, such as energy-efficient and long-life lubricants, in response to customers’ needs. It makes a significant investment each year in the research and development of new lubricant products at cutting-edge laboratories in Asia, Europe and North America. All Shell Lubricant products are subjected to rigorous development programmes, and the organisation works closely with equipment manufacturers to ensure that its products are approved for use in their equipment. The benefits of Shell lubricants are then demonstrated in construction projects around the world.

**EXTENDED EQUIPMENT AND OIL LIFE:** A construction company reported wear in its cranes’ main-boom-hoist gearboxes. It decided to switch to using Shell Omala S4 VVE gear oil, which offers greater wear protection and extended oil life. The company reports annual savings of over \$289,000<sup>1</sup> associated with reduced parts replacement, labour costs, and crane downtime.



**ENHANCED PROTECTION:** During a dam construction project, one company had to frequently replace excavator bucket pins and bushes. Maintenance costs and unplanned downtime were escalating. The company changed to Shell Gadus S3 V220AD 2 grease, which performs well in water-contaminated environments. With the new grease, the company reports a 28% reduction in operating costs.

**ENHANCED EFFICIENCY:** After comparing suppliers, a consortium selected Shell products for a major highway construction project. Using the Shell LubeAnalyst equipment condition monitoring service, it was able to optimise Shell Rimula R4 oil-drain intervals. The consortium reports saving over \$195,000<sup>1</sup> a year through a 130% increase in oil-drain intervals, which reduced oil consumption and maintenance costs, and increased equipment availability.






















FULL PRODUCT PORTFOLIO

Shell offers a comprehensive product range that is designed to help you easily select the right lubricants for your needs, including

- engine oils
- mobile hydraulic oils
- greases
- transmission and gearbox oils.



PRODUCT SELECTION GUIDE

INCREASINGLY EFFICIENT PROTECTION >>	<div>ADVANCED</div> <div>PREMIUM</div> <div>MAIN LINE</div>	DIESEL ENGINE OILS	HYDRAULIC SYSTEM AND HYDROSTATIC DRIVE OILS	POWER SHIFT TRANSMISSION OILS	TRANSFER AND DIFFERENTIAL GEAR, AND FINAL DRIVE OILS	GREASES (Many other greases available)	
						Multi-purpose EP and chassis grease	Special applications
		Shell <b>Rimula R5 LE</b>	Shell <b>Spirax S6 CXME</b>	Shell <b>Spirax S6 CXME</b>	Shell <b>Spirax S6 AXME</b>	Shell <b>Gadus S5 V220</b>	Shell <b>Gadus S4 OG</b>
		SYNTHETIC TECHNOLOGY	SYNTHETIC	SYNTHETIC	SYNTHETIC	SYNTHETIC	MOBILE OPEN GEAR
							
					Shell <b>Spirax S5 CFD</b>		Shell <b>Gadus S4 V45AC</b>
							SYNTHETIC TECHNOLOGY
							
		Shell <b>Rimula RT4 L</b>	Shell <b>Spirax S4 CX</b>	Shell <b>Spirax S4 CX</b>	Shell <b>Spirax S4 CX</b>	Shell <b>Gadus S3 V460</b>	Shell <b>Gadus S3 V460D</b>
							PINS AND BUSHINGS
					Shell <b>Spirax S3 AX</b>		
							
		Shell <b>Rimula RT4 X</b>	Shell <b>Tellus S2 V</b>		Shell <b>Spirax S2 A</b>	Shell <b>Gadus S2 V220AC</b>	
							
						Shell <b>Gadus S2 V220</b>	Shell <b>Gadus S2 V220AD</b>
							PINS AND BUSHINGS
							

A = Axle (Spirax)

A = Wet (aqueous) conditions

C = Colour

C = Construction (Spirax)

D = Contains solids

E = Energy saving, fuel efficiency

FD = Final drive


L = Low emissions


M = Maintenance saving


OG = Open gear


V = Versatile applications


X = Extra/extreme performance


 Large truck


 Heavy truck


 Bus/coach


 Construction/mobile applications


 Tractor


 Mining/mobile applications


 Open gear


 Plain bearing


 Roller bearing


 Extreme pressure


 Shock load

 High temperature

 Low temperature

 Wet conditions

 Hinge

 Wire cable

WORLD-LEADING SERVICES

The Shell LubeAnalyst oil condition monitoring service is also offered as a health check for your lubricants and machinery. It is designed to reduce costs and add value by

- helping to identify potential oil or equipment failures before they result in damage or failures
- extending lubricant life, thus reducing change-out downtimes and procurement costs
- reducing risks and contributing to safe and reliable operations.