

**DESIGNED TO ENHANCE
PRODUCTIVITY.**

**JUST LIKE OUR LUBRICANT
SOLUTIONS FOR
AUTOMOTIVE COMPONENTS
MANUFACTURING.**

DESIGNED TO MEET CHALLENGES



LUBRICANTS DESIGNED TO INCREASE PRODUCTIVITY THROUGH ENHANCED EFFICIENCY, PROTECTION AND OIL AND EQUIPMENT LIFE

DESIGNED TO IMPROVE PERFORMANCE

Lubricants can be critical to your production efficiency and are often an integral component of your product. At Shell Lubricants, we appreciate that being competitive in the global automotive component market means meeting deadlines and constantly striving to reduce downtime and increase production. We also understand the importance of innovations that enhance product performance. Choosing the right lubricants and services related to your needs can help to make a real difference to your entire operation.

Our technology-leading automotive and industrial lubricants, which are developed, researched and supported by our international team, can help you to reduce your process and equipment-ownership costs and improve product performance by providing

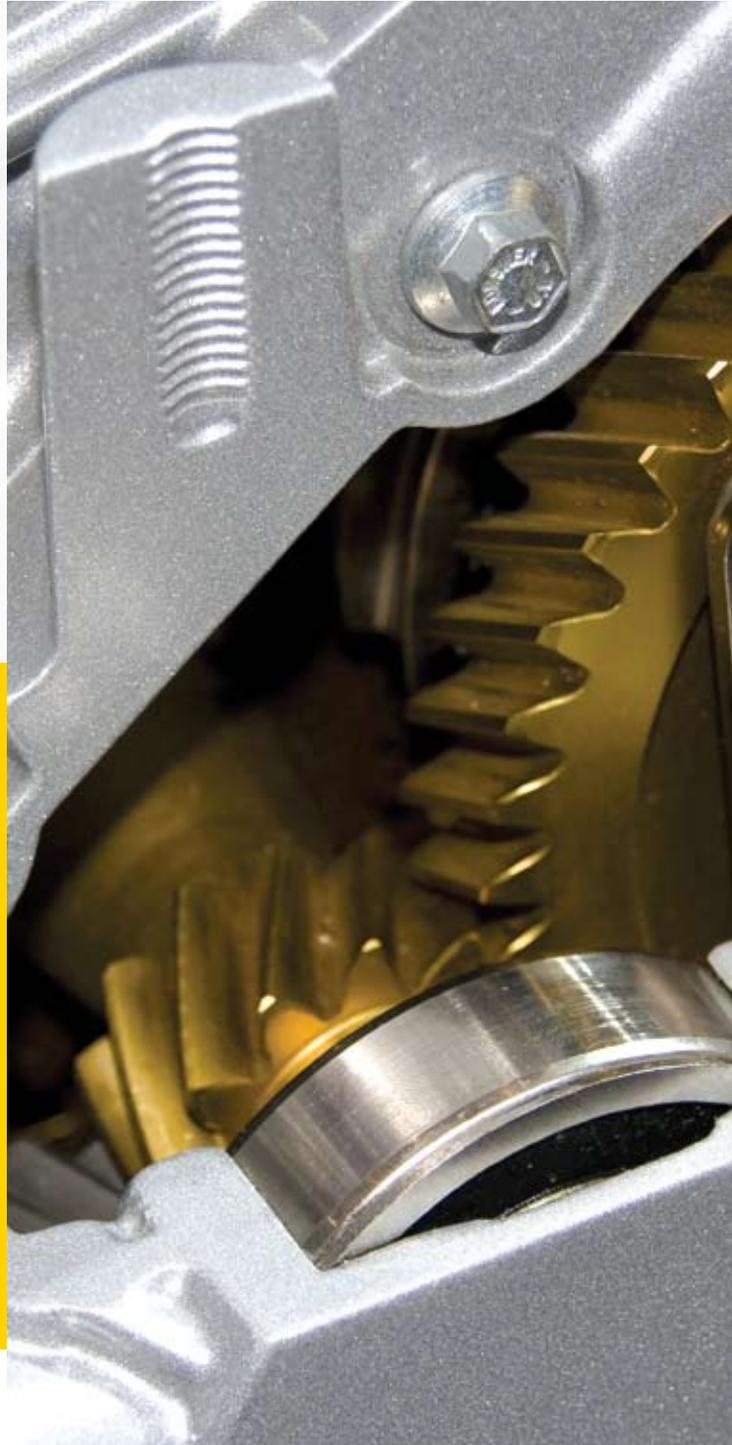
- enhanced protection
- extended oil and equipment life
- improved efficiency.

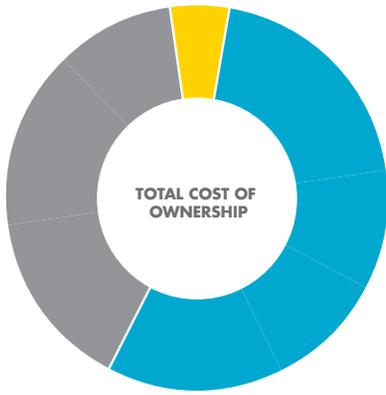
UNDERSTANDING YOUR NEEDS

As one of the world's leading suppliers of hydrocarbon products and services to the automotive components industry, we understand the crucial role that lubricants play in your facility and products. Whether you want to cut production-line maintenance costs with long-life oils and greases or to enhance the fuel economy of finished vehicles with innovative initial-fill lubricants, we have a wide range of products to choose from. We can also work with you to design lubricants specifically as components of your new products.

Our international network of automotive-industry experts can work with you to design a package of products and services that will meet your specific needs and help to increase your profitability. Not only do we supply an extensive range of lubricants, we also aim to help you to

- choose the right products
- store and apply your lubricants correctly
- achieve continuous improvement through equipment and process performance monitoring.





PRODUCT COSTS
Lubricants

MAINTENANCE COSTS
Leaks
Handling and dispensing
Oil analysis
Disposal

BUSINESS COSTS
Inventory
Administration and management
Training

LUBRICANTS – SMALL COST, BIG IMPACT

Buying low-quality lubricants can be a false economy. Lubricant costs can be as little as 5% of the total ownership costs. We focus on providing performance products that can help to reduce maintenance requirements and energy use, and services that are designed to improve maintenance and business practices, and thus lower your overall costs.



DELIVERING VALUE

By designing the right lubricants and services for your requirements, we can help you to significantly reduce your total operating and equipment-ownership costs, and enhance your product performance. For example, using high-quality, appropriate lubricants and services correctly can lower operational and maintenance costs, extend equipment life and increase product performance.

LOCALLY SUPPORTED INTERNATIONAL PRODUCTS AND SERVICES

We have an international organisation with experts in the lubrication of critical equipment based in more than 90 countries. This means that we can deliver consistent-quality products wherever you operate, for example:

- oils and greases for automotive manufacturing processes
- extender oils for rubber and tyre manufacture
- calibration and test fluids
- initial-fill lubricants for automotive drivelines, chassis, interiors, bodies and bearings.

Our experts can work with you to analyse your needs and solve your problems. They can provide and help to implement a lubrication plan designed to unlock your manufacturing and product potential. We can also engage in joint product development work to design a lubricant as a component of your product.

We offer a wide range of lubricant-related services to help you maximise the positive impact of lubricants on your operation. These services can include lubricant surveys and recommendations, inventory management, health and safety advice, and staff training.

For example, the Shell LubeAnalyst oil condition monitoring service can be a vital tool in extending the life of your production equipment. This health check for lubricants and machinery is designed to reduce costs and add value by

- identifying potential oil or equipment failures before they become critical
- extending lubricant life, thus reducing change-out downtimes and procurement costs
- reducing risks and contributing to safe and reliable operations.



HARNESSING TECHNOLOGY TO DELIVER VALUE THROUGH THE CREATION OF SOLUTIONS, SUCH AS ENERGY-EFFICIENT AND LONG-LIFE LUBRICANTS, IN RESPONSE TO CUSTOMERS' NEEDS

TECHNOLOGY WORKING FOR YOU

The development and application of innovative technology sit at the heart of everything we do at Shell. We invest in cutting-edge laboratories in Asia, Europe and the USA and recruit top-class scientists.

They are the people who develop products that make a difference to your business, even under the most challenging conditions. From the Panama Canal and the Airbus A380 to Ferrari, what we learn in our collaborations, we use to create lubricant solutions to fulfil your business needs.

And we do not just have some of the best lubricants, we also have some of the world's leading field experts working with customers every day to apply these solutions. The result? Technology that delivers value to your operation.

BESPOKE PERFORMANCE: Our customers seek competitive advantage through improved product performance. Automotive transmission manufacturer ZF needed a fluid designed to meet the needs of its sophisticated new technology. We worked with the company to create and test a new transmission fluid that gives superior shift performance. We then used our blending plant and distribution resources to deliver the large volumes and consistent product quality that the company required. The latest ZF transmission with bespoke Shell fluid is used in top-of-the-range BMW cars.



ENHANCED PROTECTION: Minimising maintenance downtime is a common goal in manufacturing. An exhaust pipe manufacturer was experiencing premature hydraulic-piston-liner wear in its pipe-bending machine and had to regularly replace damaged seals and gaskets. We recommended using Shell Tellus S2 M hydraulic oil and the Shell LubeAnalyst oil and equipment condition monitoring service. Following the switch to the new oil, the company reported saving over \$71,300¹ a year through avoiding lost production and unplanned maintenance costs.





WORKING WITH INDUSTRY

Because lubricants are critical machine components, we work with equipment manufacturers to make sure that our products help to enhance machine efficiency and offer increased protection and extended oil and equipment life.

We have long-standing relationships with many of the leading equipment manufacturers. Many of these companies supply their equipment containing a Shell lubricant as an essential component of the machine.

We have over 3,000 cases where our products are approved by or meet the specifications of equipment manufacturers or automotive suppliers, including

- ABB
- Arburg
- ArvinMeritor
- Bosch/Bosch Rexroth
- Continental
- Dana
- Delphi
- Eaton
- GETRAG
- Gleason
- Hatebur
- JATCO
- JTEKT
- Kapp
- Magna
- NTN
- Schaeffler
- Schuler/Mueller Weingarten
- SEW-Eurodrive
- SKF
- Tenneco
- ZF Friedrichshafen.

We support the development of new industry performance specifications by working with international organisations such as

- ASTM
- DIN
- ISO
- NLGI
- SAE.

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

¹Saving reported by one customer. Actual savings may vary, depending on the application, the current oil used, the maintenance procedures and the condition of the equipment.

EFFICIENCY FOR YOUR FACILITY

Over many years of working with the world's leading automotive component manufacturers, our lubricants experts have developed a deep understanding of your industry challenges. We can use our knowledge and experience to create a lubrication plan for your business and tailor our technology-leading products and services for your needs.

Challenge us to demonstrate how we can add value to your facility by **contacting your local Shell Lubricants customer service centre.**