



**Shell Lubricants**



## **AUTOMOTIVE COMPONENTS INITIAL FILL**

Lubrication designed for increased performance and technical edge

**DESIGNED TO MEET CHALLENGES**

At Shell Lubricants, working closely with automotive components businesses worldwide helps us to understand your challenges. We appreciate that to make your products competitive in the global marketplace, you need to enhance their performance.

We understand the pressure to increase product energy efficiency and reliability, and extend the life of the lubricants in them.

From engine oils to wheel-bearing greases, we supply a wide range of innovative lubricants backed up by international expertise delivered by on-the-ground technicians.

We can also work with you on joint product development projects, and use our vehicle and test-rig facilities to create lubricants specifically designed to be integral components of your products. Our lubricants and supporting services can help you to enhance your products' performance in a variety of ways, including improving product

- energy efficiency
- oil-drain intervals
- reliability.

### **IMPROVED PERFORMANCE**

Automotive transmission manufacturer ZF Friedrichshafen wanted a fluid designed to meet the performance needs of its sophisticated new transmission technology. We worked with the company to create and test a transmission fluid that gave better gear-shift performance. A second fluid was developed for its next-generation, eight-speed transmission system, which is used in BMW's flagship vehicles.

The new fluid is one of several innovations that improve the performance of ZF transmissions. The company reports that its latest eight-speed, automatic transmission achieves an 11% fuel saving.

### **INTERNATIONAL SUPPORT**

A company manufacturing automotive wheel and hub bearings wanted to expand its business. However, its bearing grease had leakage problems and did not meet international specifications.

We recommended a lithium-complex Shell Gadus grease with superior shear-stability performance. The company also benefits from our international logistical and technical expertise, and uses the Shell LubeCoach training and Shell LubeAnalyst condition monitoring services.

The manufacturer reports that using Shell Gadus grease has saved it over \$11,000<sup>1</sup> a year in direct lubricant costs and helped it to win new contracts worth over \$1 million<sup>1</sup> a year in profits.



## WHERE LUBRICANTS CAN ADD VALUE

Some examples of ways that initial-fill lubricants can enhance product performance

**1 PRODUCT DEVELOPMENT**

**2 ENHANCED PROTECTION**

**3 ENERGY EFFICIENCY**

**4 BETTER ENGINE CLEANLINESS**

**1 PRODUCT DEVELOPMENT** to ensure that your lubricants are designed as product components

**2 ENHANCED PROTECTION** with Shell Gadus greases

**3 ENERGY EFFICIENCY** and performance with Shell Spirax or bespoke transmission fluids

**4 BETTER ENGINE CLEANLINESS** and long service life with Shell Helix Ultra engine oils

### APPROVALS AND SPECIFICATIONS

So that you get the most from your products, we work closely with automotive-component suppliers. Shell initial-fill lubricants for automotive component are either approved by or meet the specifications of many suppliers, including

- American Axle & Manufacturing
- Borg Warner
- Bosch
- Dana
- Denso
- GETRAG
- JTEKT
- Magna International
- NTN
- Schaeffler
- SKF Automotive
- Thyssen Krupp Technologies
- TRW Automotive
- ZF Friedrichshafen.

### FIND OUT MORE – TALK TO SHELL LUBRICANTS

Challenge us to demonstrate our plan for adding value in your automotive products by contacting your local Shell lubricants customer service centre.

[shell.com/autocomp](http://shell.com/autocomp)

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

<sup>1</sup>Savings for a specific customer. Savings may vary from site to site depending on the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.

