A Thai company that manufactures pickup trucks has one of the most modern assembly plants in Asia with state-of-the-art production equipment, including 18 Kawasaki ZX165U industrial robots.

The company previously used Shell Alvania EP R0 to grease the enclosed gear system on each robot, which was as specified in the manual. However, at that time the product was already obsolete, and the company needed an alternative. It was concerned that changing the grease would affect the durability of the gearboxes and lead to repair costs and lost production.

The Shell Lubricants technical team demonstrated that Shell Gadus S2 V220 could be used in the robots’ enclosed gears. As part of the Shell LubeAdvisor service, the technical team also advised the company on monitoring the temperature of the enclosed gears to help predict the lubrication system’s performance and to minimise failure.

Since switching to Shell Gadus S2 V220, the company has had no equipment downtime or gear failures in its industrial robots. It has avoided the cost of replacing the enclosed gears on each of the 18 robots, which represents a total saving of US$154,286.

*Shell Gadus S2 V220 is the new name for the Shell lubricant formerly known as Shell Alvania EP(R)0.
Shell Gadus S2 V220 are high-quality, multipurpose, extreme-pressure greases based on a blend of high-viscosity-index mineral oils and a lithium hydroxystearate soap thickener. They contain extreme-pressure and other proven additives to enhance their performance in a wide range of applications. The greases are designed for multipurpose grease lubrication of rolling element and plain bearings as well as hinges and sliding surfaces such as those found in most industrial and transport sectors.

Applications

Shell Gadus S2 V220 is designed for multipurpose grease lubrication, including but not limited to:
- enclosed gear boxes
- specialised dispensing systems where a softer grease is necessary.

Performance features and benefits

- Outstanding load-carrying capacity. Shell Gadus S2 V220 greases contain special extreme-pressure additives that enable them to withstand heavy and shock loads.
- Improved mechanical stability. This is particularly important in vibrating environments where poor mechanical stability can lead to grease softening and consequent loss of lubrication performance and leakage.
- Good resistance to water washout. Shell Gadus S2 V220 greases have been formulated to offer resistance to water washout.

Oxidation stability. The specially selected base oil components have excellent oxidation resistance. Their consistency will not alter in storage and they withstand high operating temperatures without hardening or forming bearing deposits.

Anti-corrosion protection. Shell Gadus S2 V220 greases have an affinity with metal and can protect bearing surfaces against corrosion, even when the grease is contaminated with water.

Specifications and approvals

Shell Gadus S2 V220 is approved by over 24 major companies and is listed by more than 100 major companies across a wide variety of industries.

Complementary products

<table>
<thead>
<tr>
<th>Application</th>
<th>Lubricants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic oils</td>
<td>Shell Omala gear oils</td>
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<tr>
<td>Gear oils</td>
<td>Shell Corena compressor oils</td>
</tr>
<tr>
<td>Compressor oils</td>
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<tr>
<td>Slideway oils</td>
<td>Shell Tonna</td>
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</tbody>
</table>

A Thai vehicle manufacturer previously used Shell Alvania EP R0 to grease the enclosed gear system on each of its robots. However, at that time the product was already obsolete, and the company was concerned that changing the grease would affect the durability of the gearboxes and lead to repair costs and lost production.

Since switching to Shell Gadus S2 V220, the vehicle manufacturer has had no equipment downtime or gear failures in its industrial robots.

The company has avoided the cost of replacing the enclosed gears on each of the 18 robots, which represents a total saving of US$154,286.

The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending, for example, on the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.