



Shell Lubricants

SURFACE MINING

Lubrication designed for improved operating efficiency and increased productivity

DESIGNED TO MEET CHALLENGES

At Shell Lubricants, working closely with the opencast mining industry worldwide helps us to understand your challenges. We appreciate that to be profitable, you need to reduce the unit cost of production and increase equipment availability. We also understand your need for security of supply and lubricants that perform in tough conditions.

From heavy-duty engine oils to specialist open-gear lubricants, we supply a wide range of innovative products backed up by international expertise delivered by on-the-ground technicians. Our lubricants and supporting services are designed to help you to reduce maintenance costs and emissions, and increase equipment availability and productivity.



INCREASING OPERATIONAL EFFICIENCY

At a large opencast gold mine, premature bearing wear caused by dust and water contamination, and irregular greasing was causing a critical production belt to become unreliable.

Through the Shell LubeAdvisor service, our experts recommended the Shell Tactic EMV automated greasing system with Shell Gadus S3 T220 2 grease. Maintenance staff were given training through the Shell LubeCoach service.

With the new system, the company reports saving over \$167,000¹ a year from

- reduced maintenance costs
- increased production.

CUTTING OPERATING COSTS

One company, having increased production at its opencast mine by 50%, wanted to be sure that its trammel-washer gearboxes were properly protected and operating efficiently.

The company upgraded its gearbox lubricant to Shell Omala S4 WE oil. It reports that the change is saving over \$380,000¹ a year by reducing

- maintenance costs
- energy consumption
- equipment downtime.



WHERE LUBRICANTS CAN ADD VALUE

Some examples of ways that lubricants can help your operation to run more efficiently

SURFACE MINING

1 **ENHANCED PROTECTION**

2 **EFFICIENT LOW-TEMPERATURE OPERATIONS**

3 **ENERGY EFFICIENCY**

4 **EXTENDED LIFE**

5 **EFFICIENT OPERATIONS**

6 **REDUCED COSTS**

Dragline

Shovel and excavators

Haul truck

Crusher and conveyors

Ore processing

Mill

1 **ENHANCE PROTECTION** and longer service intervals with Shell Rimula R4 L engine oil

2 **EFFICIENT LOW-TEMPERATURES OPERATIONS** using Shell Tellus S4 VX synthetic hydraulic fluid

3 **ENERGY EFFICIENCY** and long service life with Shell Omala S4 GX advanced gear oil

4 **EXTENDED LIFE** and protection using Shell Gadus S3 V220C grease

5 **EFFICIENT OPERATIONS** through Shell lubeExpert technical advice and Shell LubeCoach training

6 **REDUCED COSTS** from Shell LubeAnalyst used-oil analysis for preventive maintenance

APPROVALS AND SPECIFICATIONS

So that you get the most from your machines, we work closely with equipment manufacturers. Shell lubricants for surface mining operations are either approved by or meet the specifications of many equipment manufacturers, including

- Bucyrus International
- Caterpillar
- Cummins
- Detroit Diesel
- Falk
- GE
- Hägglunds
- Hitachi
- Komatsu
- Liebherr
- Metso Minerals
- MTU
- P&H
- Sandvik
- Tamrock
- Terex.

FIND OUT MORE – TALK TO SHELL LUBRICANTS

Challenge us to demonstrate our plan for adding value to your opencast mining operations by contacting your local Shell Lubricants customer service centre.



shell.com/mining

"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.

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