

# Rock Quarry Equipment Reliability Improves with Chesterton® Lubri-Cup EM-VS and 615-HTG#2

Mining Industry  
Chesterton Lubri-Cup™ EM-VS and 615 High Temperature  
Grease (HTG) #2  
IL/MRO Case Study

## Challenge

### Background

A rock quarry was experiencing frequent bearing failures on their mobile crushing, sorting, and sizing equipment. The failures were primarily caused by inconsistent maintenance and the use of underperforming grease, leading to increased downtime and repair costs. They reported at least one bearing failure every other month.

They needed a high-performance grease capable of withstanding extreme pressures, moisture, corrosion, and heavy abrasive dust. As labor shortage was one of the reasons for inconsistent maintenance, they needed to automate the lubrication process.



Mobile mining equipment encountering constant bearing failures.

## Solution

### Product

**Chesterton Lubri-Cup™ EM-VS** automated lubrication dispenser, and **Chesterton 615 HTG #2 Grease**, featuring the **Quiet Bearing Technology (QBT™)** additive package, was recommended.

The **Lubri-Cup™ EM-VS** is activated by equipment vibration, ensuring lubrication occurs only when the equipment is running, preventing over-lubrication and helping to maintain constant pressure, and keeping dirt and dust out of the bearing housing. **615 HTG #2 Grease** is designed to withstand extreme pressures in demanding quarry operations.



Chesterton Lubri-Cup EM-VS with 615 HTG #2 grease: a contamination tight comprehensive solution.

## Results

### Improved Reliability

The customer saw significant benefits within a few months. Bearings lasted much longer, reducing the need for unplanned shutdowns. With automated lubrication in place, they were able to allocate resources more efficiently.

### Cost Savings:

Downtime cost per bearing failure =	\$49,000.00/incident
Annual downtime cost with one incident every other month =	\$294,000.00/year
Labor and repair cost for changing bearings =	\$32,000.00/year
Total cost of bearing failure before Chesterton solution adopted =	\$326,000.00/year
Initial cost of Chesterton solution - Grease and Lubri-Cups =	\$65,000.00
<b>Total Cost Savings in the first year following installation</b>	<b>= approx. \$261,000.00</b>

\$ = USD



Mining equipment after installing the Chesterton solution showed significant reliability improvement.