



# Shell Lubricants

## MINING & QUARRYING

Shell Rockdrill grease trial shows a 75% decrease in product consumption, with the alleviation of health and environmental concerns

67% total annual reduction in product spend

**US\$8,100**



*Anglo American is one of the world's largest diversified mining and natural resource groups.*



**Shell was given the opportunity to trial Shell Rockdrill Grease, specifically designed for the mining industry.**

**Company:** Anglo American  
**Country:** South Africa  
**Application:** Underground mining (hard rock)  
**Saving:** US\$8,100 total annual customer saving  
**Key edge:** Shell Rockdrill Grease

Excessive wastage of rockdrill grease and misting were primary concerns for the customer due to consequential environmental and HSE impacts. Shell developed and trialed a specialist rockdrill grease and grease applicator with the team at Anglo Platinum's Amandelbult mine to address this particular problem. The trial results were very positive, decreasing the impact of both issues and reducing overall costs by US\$8,100, a 67% reduction in product spend.

SSC001



DESIGNED TO MEET CHALLENGES





## 1 The Challenge:

Anglo American was experiencing high levels of rockdrill grease wastage and excessive misting. This was causing concern for the health of staff working in close proximity and was having adverse environmental impacts. Shell presented a cost effective and environmentally beneficial proposal to address these problems.

## 2 The Solution:

Shell worked alongside the Anglo Platinum's team to test the new rockdrill grease and grease applicator in a designated shaft at the Amandelbult mine. The trial's success was measured by monitoring mist levels and product consumption, which proved to decrease dramatically. The Shell Rockdrill grease and applicator is specifically designed to reduce mechanical wear, limit grease consumption and combat excessive misting.

## 3 The Outcome:

The benefits experienced through the trial included:

- Reduction in product consumption from two 500g grease sachets per shift to one sachet of 334g
- Improvement in air quality due to the reduction of oil misting
- Less mechanical wear
- Increase in drill speed and efficiency
- Fall in operating noise levels
- Reduction in overall maintenance costs due to mechanical efficiency

## 4 The Value:

Anglo Platinum's Amandelbult mine witnessed a 75% reduction in annual product consumption after changing over to the specifically formulated Shell Rockdrill grease.

With impressive measurable results, the total annual saving for this trial can be calculated at US\$8,100. Anglo Platinum intend to apply this solution across the entire mine with an estimated potential value of US\$420,000.

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

### Shell Rockdrill Grease

Shell Rockdrill Grease is a light brown, lithium/calcium soap based semi-fluid grease developed specifically for the lubrication of pneumatic rockdrills operated under harsh conditions. It contains anti-wear and tackiness additives and offers exceptional corrosion protection even from the highly corrosive mine waters often used as service water deep underground.

Shell Rockdrill Grease may be applied through the commonly used air-line grease lubricators where, due to its consistency, it is generally more economical to use than oil.

#### Special properties

Excellent corrosion protection imparted by use of carefully selected additive technology and lithium/calcium soap gives very good water repellency.

Tacky nature and resistance to water washing ensures grease is retained in critical areas and in turn does not cause "misting" common with oil lubrication.

#### Complementary products

Complementary products		Widely Used Products
Hard Rock Mining	Heavy-duty Diesel Hydraulic Oils	Shell Rimula R (Transport) Shell Tellus
Automotive	Gear Oils	Shell Spirax (Transport)
Industrial	Gear Oils Transmission Oils	Shell Omala Shell Donax (Transport)



Shell Lubricants

WWW.SHELL.COM/MINING