



# Shell Lubricants

METALS

US\$18,000 reported saving  
by steel mill after switching to  
Shell Omala 220 with technical  
support from Shell Lube**Advisor**

Total reported  
annual customer  
saving

**US\$18,000**



*Baotou Railway Steel Mill is part of a large integrated iron and steel production complex in Northern China.*

**This modern high speed railway factory is served by seven hot saws. The customer was dissatisfied with the wear of gear surfaces and shorter oil drain intervals. Shell was asked to investigate and propose a solution.**

**Company:** Baotou Railway Steel Mill

**Country:** China

**Application:** Gearbox

**Saving:** US\$18,000 total reported annual customer saving

**Key edges:** Shell Omala 220, Shell Lube**Advisor**

By using Shell Lube**Advisor**, a product and application support service, Shell technicians were able to identify key performance issues and recommended the customer switch to Shell Omala 220. A trial proved the application benefits of high performance protection and reduced gearbox wear. Shell Omala 220 also enabled extended oil drain intervals and significantly helped reduce maintenance costs. Overall savings were estimated at US\$18,000 per year.

AJT0040

DESIGNED TO MEET CHALLENGES



## 1 The Challenge:

Due to rapid wear of gear surfaces the customer faced early maintenance of its hot saw gearbox, with high component costs. Oil drain and filter replacement intervals were shorter than expected.

The Shell technicians had to identify and analyse the lubrication issues affecting premature gearbox wear and propose a lasting solution that would also enable extended oil drain intervals without risk to mechanical integrity.

## 3 The Outcome:

As a total lubricant solutions provider, Shell was able to deliver a combination of expert technical support and premium product application benefits that exactly matched the customer needs, achieving:

- Reduced component wear
- Reduced oil/filter consumption
- Increased oil drain intervals
- Substantial cost savings

## 2 The Solution:

By using Shell LubeAdvisor, it was possible to monitor oil condition and rapidly identify wear protection issues. With accurate data and expert analysis, the Shell technicians were able to select a lubricant specification with all the appropriate application benefits needed to solve the problem. Shell Omala oils are premium quality, lead-free, extreme pressure performance gear lubricants.

## 4 The Value:

As a result of Shell's thorough technical analysis, the customer was able to switch to Shell Omala 220 with confidence and quickly achieve both of its objectives – longer component life and extended oil drain intervals. Also, the cost saving benefit was reported at US\$18,000 per year.

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 Omala HD

#### Synthetic heavy-duty industrial gear oils

Shell Omala HD is an advanced synthetic heavy-duty industrial gear oil offering outstanding lubrication performance under severe operating conditions, including improved energy efficiency, long service life and high resistance to micro-pitting for optimal gear protection.

#### Applications

- Enclosed industrial reduction gear systems operating under severe operating conditions, such as high load, very low or elevated temperatures and wide temperature variations
- Particularly recommended for certain 'lubricated-for-life' systems
- Plain and rolling element bearings
- Oil circulation systems

#### Performance features and benefits

- Excellent load carrying capacity and micropitting performance providing long component life
- Excellent oxidation and thermal stability extending lubricant life
- Longer service intervals
- Superior lubricant performance improving gear efficiency
- Outstanding rust and corrosion protection of all metal surfaces
- Rapid water shedding and air release performance



#### Specifications and approvals

Meets ISO 12925-1 Type CKD  
Meets ANSI/AGMA 9005-D94  
Meets US Steel 224  
Fully approved by Flender AG  
Meets David Brown S1.53.101  
Meets the requirements of DIN 51517-3

#### Complementary products

Equipment	Lubricants
Hydraulic Systems	Shell Tellus/S
Bearings	Shell Alvania EP (LF), Shell Albida EP
Back-up Roll Bearings	Shell Vitrea M, Shell Morlina/SD
Work Roll Bearings and Coilers	Shell Omala, Shell Alvania WR/EP (LF), Shell Albida EP/HD
Gear Couplings	Shell Alvania GL/GC, Shell Malleus GL, Shell Albida GC
Gear Systems	Shell Omala
Electrical Motor Oil System	Shell Turbo T



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