



Shell Lubricants

METALS

Reported savings of US\$51,700
at a primary steel mill via a
comprehensive lubricants
solution from Shell

Total reported
annual customer
saving

US\$51,700

Company: Wuhan Iron and Steel Group
Country: China
Application: Steel mill
Saving: US\$51,700 total reported
annual customer saving
Key edges: Shell Albida HD 2,
Shell LubeAnalyst

*Wuhan Iron and Steel Group is a top three
supergiant iron and steel complex in China,
producing twenty eight million tons of both
iron and steel annually.*

**Wuhan Iron and Steel was experiencing
higher than expected bearing lubricant
consumption in the work roll of the
hot strip mill.**

With cost concerns and maintenance issues arising from this situation, the customer turned to Shell for advice. Following a review of maintenance practices and lubricant performance, Shell recommended a comprehensive technical service plan aimed at reducing lubricant consumption and increasing bearing life. After a switch to Shell Albida HD 2 and regular bearing and grease condition monitoring using Shell LubeAnalyst, the customer reported an annual saving of US\$51,700.

WBE0023

DESIGNED TO MEET CHALLENGES



1 The Challenge:

To find a long term solution that reduced grease consumption and delivered long term cost savings, Shell chose to review all operational considerations, including refilling procedures. The customer also agreed to introduce a detailed regular oil condition monitoring system suggested by Shell technical team.

3 The Outcome:

By using Shell LubeAnalyst, it was possible to prove that Shell Albida HD 2 delivered excellent anti-wear protection over the whole life of its application, including extended replacement intervals. As a result, re-greasing intervals were safely increased, bearing life was extended and targets for reduced bearing lubricant consumption were met. The reduction of grease consumption also implied a smaller impact on the environment.

2 The Solution:

Shell Albida HD 2 was the grease product selected for a trial. Recommended for heavy load, heavy-duty bearing, it has excellent proven high temperature and long life capabilities. This switch was complimented by:

- Revised grease refilling procedures – reducing the risk of bearing rust and corrosion occurring
- Regular grease condition monitoring using Shell LubeAnalyst
- Continuous bearing temperature monitoring, which proved the high level on-going wear protection offered by Shell Albida HD 2
- A Shell technical seminar delivered to customer's staff

4 The Value:

By applying the lubricant solution suggested by the Shell team, Shell Albida HD 2 combined with Shell LubeAnalyst, the customer reported additional value through improvements in its operations. The long term annual savings can be estimated at US\$51,700.

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 Albida HD 2

Top quality, high temperature, heavy-duty grease

Shell Albida HD 2 has excellent long life capabilities.

It is recommended for use in heavy load, heavy-duty bearings which are subjected to high temperatures. Shell Albida HD 2 is made with very high viscosity base oils.

Performance features and benefits

- Reduced grease consumption delivered through improved resistance to washout and vibration resulting from its Shell formulation
- Reduced grease consumption even at high temperatures, as grease resists melting and subsequent leakage, because of the lithium complex thickener used

Main applications

- Steel, mining, cement, paper and chemical applications using heavy-duty slow moving plain and rolling element bearings operating in severe environments:
 - Heavy loads
 - High temperature (continuously above 120°C)
 - High levels of vibration
 - Water rich environments



Additional information

Shell Albida HD 2 is recommended for use between the temperature range -20°C to 150°C.

Complementary products

| Equipment | Lubricants |
|---|---|
| Hydraulic Systems | Shell Tellus S, Shell Tellus |
| Bearings | Shell Alvania EP(LF), Shell Albida HD |
| Rolling Mills - Gear Oils | Shell Omala |
| Morg Oil Bearings | Shell Vitrea M, Shell Morlina, Shell Morlina SD |
| Pre-Finish and Finish Mills of Wire Rod Mill Bearing and Circulating Oils | Shell Morlina T |
| Electrical Motor Oil System | Shell Turbo T |



Shell Lubricants

WWW.SHELL.COM/METALS