Shell Lubricants Metals

SHELL MORLINA S2 BA HELPS WIRE PRODUCT MANUFACTURER INCREASE PRODUCTION AND REDUCE COSTS

TOTAL REPORTED ANNUAL CUSTOMER SAVING

US$1,081,000

COMPANY: Baotou Tiancheng Wire Rod Co. Ltd

COUNTRY: China

APPLICATION: Bearings

SAVING: US$1,081,000 total reported annual customer saving

KEY EDGE: Shell Morlina S2 BA 100, Shell LubeAnalyst

CRC00002

Chinese company Baotou Tiancheng Wire Rod Co. Ltd produces wire products using a Morgan high-speed wire rod mill. The company was experiencing problems with the circulating oil in the finishing mill and had an average of one hour of unplanned downtime per month. The oil also had an unpleasant odour, foamed excessively and frequently blocked the oil filters. The company wanted to improve efficiency and increase production by reducing unplanned shutdowns, so turned to the Shell technical team for help.

Shell investigated the problems and recommended that Baotou Tiancheng Wire Rod should switch to Shell Morlina S2 BA 100, a high-performance oil for challenging industrial bearing and circulating applications. The team also offered the Shell LubeAnalyst oil and equipment conditioning monitoring service to review oil-drain and filter-change intervals.

The company changed to Shell Morlina S2 BA and has since had no unplanned shutdowns related to oil performance and has benefited from increased production of about 330,000 t of product over a nine-year period. By using Shell LubeAnalyst, Baotou Tiancheng Wire Rod also identified that it could extend its filter-change interval from seven days to one month, and its oil-drain interval from one year to more than three years. As a result of increased production and reduced maintenance costs and oil and filter consumption, the company has reported total annual savings of US$1,081,000.

1 CHALLENGE

Chinese manufacturer Baotou Tiancheng Wire Rod was experiencing problems with the circulating oil in its wire finishing mill and had an average of one hour of unplanned downtime per month. The oil also had an unpleasant odour, foamed excessively and frequently blocked the oil filters.

2 SOLUTION

Shell investigated the problems and recommended that Baotou Tiancheng Wire Rod should switch to Shell Morlina S2 BA 100, a high-performance oil for challenging industrial bearing and circulating applications. The team also offered the Shell LubeAnalyst oil and equipment conditioning monitoring service to review oil-drain and filter-change intervals.

3 OUTCOME

The company changed to Shell Morlina S2 BA and has since had no unplanned shutdowns related to oil performance and has benefited from increased production of about 330,000 t of product over a nine-year period. It has also extended its filter-change and oil-drain intervals.

4 VALUE

As a result of increased production and reduced maintenance costs and oil and filter consumption, the company has reported total annual savings of US$1,081,000.[1]

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

SHELL MORLINA S2 BA 100

SPECIAL APPLICATION BEARING AND CIRCULATING OILS

Shell Morlina S2 BA oils are high-performance oils designed to provide excellent protection for most challenging industrial bearing and circulating applications such as those found in Morgan No-Twist® mill systems. It meets the requirements of equipment manufacturers such as Morgan and Danieli.

Applications

- Morgan No-Twist mill systems. Shell Morlina S2 BA oils meet the demanding requirements for the lubrication of Morgan No-Twist mill systems where a single lubricant (ISO or above) is required to protect the highly loaded roller and plain bearings working at high speeds and to work satisfactorily even when contaminated with cooling water and iron oxides from the mill.
- General industrial bearing and circulating systems. Shell Morlina S2 BA oils are suitable for use in many general industrial lubrication systems where an anti-wear lubricant with moderate extreme-pressure properties is required.
- Enclosed industrial gear systems
- Low or moderately loaded enclosed gears where moderate extreme-pressure performance is sufficient

Performance features and benefits

- Good oil life – maintenance saving. Shell Morlina S2 BA oils are formulated with a well-proven rust and oxidation inhibitor package that helps to provide consistent performance and protection throughout the maintenance interval.
- Reliable wear and corrosion protection. Shell Morlina S2 BA oils help to prolong the life of bearings and circulating systems through
  - enhanced water separation characteristics that help to ensure that critical oil films are retained between highly loaded parts in heavily contaminated environments
  - good air release characteristics to minimise cavitation and the associated damage to circulating pumps
  - protection against corrosion oxidation and emulsion formation, even in the presence of water
  - reduced wear of bearings during mill operation.
- Maintaining system efficiency. Shell Morlina S2 BA oils are blended with high-quality, solvent-refined base oils that promote good water separation and air release to ensure the efficient lubrication of machines and systems. Shell Morlina S2 BA oils are also suitable for use with fine filtration to help ensure effective contaminant-free lubrication to critical machine parts.

Specifications and approvals

Morgan MORGOIL® Lubricant Specification New Oil (Rev. 1.1); Morgan No-Twist Mill Specification MMC40003 (MORGOIL and No-Twist are registered trademarks of the Morgan Construction Company); Danieli Standard Oil 6.124249.F; SEB 181-225 specification; DIN 51517-1, Type C; and DIN 51517-2, Type CL

Complementary products	
Application	**Lubricants**
Hydraulic fluids	Shell Tellus
Gear oils	Shell Omala
Greases	Shell Gadus

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"Shell Lubricants" refers to the various Shell companies engaged in the lubricants business.
The information contained in this leaflet is correct as at 22 June 2009.

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