Shell Lubricants
METALS

US$790,179 saving reported for steel producer using Shell Lube**Expert** leak detection service

Total reported annual customer saving **US$790,179**

Company: Global steel producer
Country: USA
Application: Back-up roll bearings, gear systems
Saving: US$790,179 total reported annual customer saving
Key edge: Shell Lube**Expert**

Hot strip mills at leading US based steel producer.

The customer was looking to maximise operational efficiencies and reduce its lube oil consumption per tonne of steel produced as benchmarked against other steel producing facilities. They approached Shell for technical support to help reduce oil loss on their back-up roll bearings and gear systems.

The Shell Lube**Expert** leak detection system is designed to help customers minimise leaks in large circulating oil and hydraulic oil systems. Following extensive analysis in six separate areas, across two integrated steel mills, Shell technicians presented the customer with a detailed report supported with photographic evidence and oil loss calculations. By minimising leaks in six major systems it was calculated that the overall customer saving would be substantial at US$790,179.

FGU013-018

1 The Challenge:

With a drive to reduce total cost of ownership this steel mill turned to Shell for help in reducing their total lube oil consumption per tonne of steel produced. It also required accurate calculations of lubricant loss, to support cost benefit analysis and maintenance scheduling.

2 The Solution:

The Shell Lube**Expert** leak detection tool works by introducing a fluorescent dye to the lubrication system and detecting leaks using a UV light source. Full compatibility of dye and lubricant is checked first and the oil system left to circulate for 24 hours before Shell technicians begin the leak finding process.

3 The Outcome:

As well as identifying the location of leaks including those in difficult to see areas, Shell added value by calculating the extent of the oil leaks and providing a comprehensive documented survey. With this data the customer could accurately prioritise a maintenance schedule to repair the leaks.

4 The Value:

By minimising oil leaks the customer will be able to realise significant savings in product procurement costs, reduced oil consumption/ton of steel produced and improved safety. Reduced oil leaks will also have an impact on waste water treatment costs. Total saving across all six systems was calculated at US$790,179.

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 LubeExpert

The Shell team delivering the Shell Lube**Expert** service pride themselves on being customer facing and available to work on critical applications and challenging lubrication problems to help ensure equipment runs smoothly. With sector and application knowledge, the Shell Lube**Expert** service delivers real value and competitive advantage to the business.

Performance features and benefits

- Provides critical application support to customers carrying out inspections and producing reports
- Working with customers to solve maintenance or production problems that can be solved by improved lubrication
- Designing new products for special applications or first fill of the customer's own products

Complementary services

Shell LubeAnalyst — Shell Lube**Analyst** is a world-class global oil and equipment condition monitoring service.

Shell LubeAdvisor — Shell Lube**Advisor** is a suite of elements bringing product and application support to customers.

Shell LubePlanner — Shell Lube**Planner** helps customers develop and run a comprehensive lubrication maintenance programme.

Shell LubeCoach — Shell Lube**Coach** is a Shell quality training programme specifically designed to empower customers and their teams.

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'Shell Lubricants' refers to the various Shell companies engaged in the lubricants business.