

# Mobil™Solvancer® stabilizes rising bearing temperatures in centrifugal compressor and keeps machinery operational

Centrifugal Compressor | Refining | Baton Rouge, Louisiana

## Situation

A major refining corporation requested assistance in troubleshooting an issue with rising bearing temperatures. Temperature trends displayed a steady increase over the course of about two months. At peak, base running temperatures were around 225°F, with short duration temperature spikes approaching 250°F. Used oil analysis showed no signs of degradation or varnish potential. The refinery was facing machine shutdown if bearing temperatures climbed further and reached out to the Mobil™engineering team for troubleshooting strategies.

## Recommendation

The Mobil™engineering team evaluated bearing temperature trends. They demonstrated a very distinct sawtooth pattern indicative of hot varnish. The inboard and outboard bearing also showed variations in operating temperature, which further supported the possibility of varnish formation. Mobil™engineers recommended **Mobil™Solvancer®**, oil-soluble cleaner, as a possible solution. **Mobil™Solvancer®**, oil-soluble cleaner, is capable of quickly dissolving deposits and varnish which helps maintain cleanliness of critical bearings and seals. With guidance from Mobil™engineers, **Mobil™Solvancer®**, oil-soluble cleaner, was added to the system reservoir at a concentration of 7.5%. Bearing temperatures were monitored for signs of relief. After two days of runtime, bearing temperatures dropped 30°F and remained stable.

## Impact

Through quick action and sound guidance from the Mobil™ engineering team, the application of **Mobil™Solvancer®**, oil-soluble cleaner, provided tremendous benefit to the facility and resulted in \$43K\* of annual savings. **Mobil™Solvancer®**, oil-soluble cleaner, enabled an immediate solution to effectively address bearing temperature escalation, while keeping the machinery operational to maximize production.



## Potential Annual Savings



**\$ 43,490 USD\***

Revenue Improvement

## Advancing Productivity

Helping you reach your Safety, Environmental Care\*\* and Productivity goals through our innovative lubricants and services is our highest priority. That's Advancing Productivity. And that's how we help you achieve your broader vision of success.

This Proof of Performance is based on the experience of a single customer. Actual results can vary depending upon the type of equipment used and its maintenance, operating conditions and environment, and any prior lubricant used. \*\*Visit mobil.com to learn how certain Mobil-branded lubricants may provide benefits to help reduce environmental impact. Actual benefits depend upon product, operating conditions and application. Copyright © 2024 ExxonMobil. All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries. All Rights Reserved. ©2026 Fluitec. Fluitec, DECON and Solvancer are registered trade-marks of Fluitec NV or one of its subsidiaries. Other trademarks shown are property of their respective owners.