

# Case Study

# **NYE LUBRICANTS SUCCESS STORIES**

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### LOCKHEED MARTIN

**Industry:** Aerospace

**Application:** HD Satellite Camera

Component: Bearing

Location: Sunnyvale, CA

Time Period: January 2007 -March 2007

## **BACKGROUND**

Lockheed Martin designs and manufactures advanced technology systems and products for the aerospace industry. The company was launching a new generation of high definition satellite cameras. They were working with The Aerospace Corporation on a project to reduce volatile contaminants close to the camera's lens. Both companies were concerned that the cameras would be compromised if volatiles settled near the lens, potentially fogging it up.

For more information, contact our technical expert.

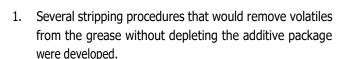
Sr. Technical Support Engineer

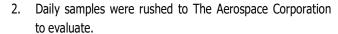
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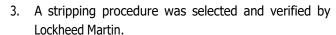
### CHALLENGES

- Can Nye decrease the outgassing rate of both Rheolube® 2000 and Rheolube® 2004?
- Can this project be completed in time for the satellite launch?

### SOLUTION





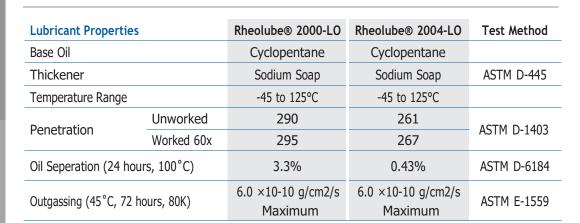




HD Satellite Camera

- 4. Nye upscaled the process to fulfill the volume of grease needed for the launch date.
- Nye purchased a vacuum oven that was large enough and could pull the required vacuum level to treat the lubricant.
- 6. The vacuum oven was modified by Nye to control and monitor heat precisely.
- 7. Nye stripped production batches of both Rheolube® 2000 and Rheolube® 2004.
- Tests to confirm the extreme requirements of the lubricants were performed by Nye, Lockheed Martin and The Aerospace Corporation.

# **RESULTS**



The result of all these efforts was the birth of Rheolube® 2000-LO and Rheolube® 2004-LO. The project was a huge success. According to an unclassified report by a Lockheed Martin employee the "Stripped Grease is Awesome." Nye demonstrated to Lockheed Martin our "can do attitude."