

Customer Testimonial



AMS Filtration System

W R Grace Corporation – Curtis Bay, Md.

MG Pump (Industrial Homogenizer)

- *Extended oil drain intervals from 2 weeks to 12 weeks*
- *Eliminated unexpected equipment downtime*

Customer Profile

Curtis Bay, Maryland is home to Grace Davison's largest manufacturing plant, Curtis Bay Works, as well as a technical and analytical service center. Chemical operations at this site have been continuously modernized and expanded since originally built in 1909. Current manufacturing activities consist of ten production facilities that manufacture thousands of products from four general product lines: fluid cracking catalysts, hydro processing catalysts, polyolefin catalysts, and silicas. Production processes include crystallization, mixing, filtering and washing, drying and calcination (high temperature drying).

Application

Two MG pumps (fluid homogenizers) are used in the production of one of Grace's most profitable product lines.

Challenge

The pumps are water-cooled and have a single camshaft that was previously lubricated by an ISO 320 synthetic product. When the production product would penetrate the packing seals and enter the camshaft housing, the oil would contaminate, thicken and have to be changed. The average life expectancy was two weeks, costing not only a loss in production, but also over four man-hours to drain, clean and refill the sump with fresh oil. The MG pumps each hold 15 gallons of oil.

LE Solution

Chris Nowlen, LE lubrication consultant, worked with Allan Andreyca, W R Grace reliability engineer, to develop a solution to his problem. Grace wanted to extend the oil life by any means possible.

Lubrication Engineers Reliability Partner, AMS Filtration, was called in to offer some form of guidance. Mr. Dennis Morgan,



AMS president, personally came to the facility and customized a permanent filtration system to be used by Grace.

Results

The AMS Filtration System was installed and brought on line. The results have been better than expected with the following information recorded:

- Successful replacement of synthetic ISO 320 to LE's All Purpose Turbine Oil (4946) ISO 220
- Oil life is now, on average, 12 weeks or 6 times as long as previous lubricant (still in service as of this writing)
- There are less man-hours needed
- No loss of production due to unexpected downtime
- Cost savings of \$ 25,000 so far

Other Products Used

W R Grace is currently using 100% of Lubrication Engineers products and services, including all applicable Reliability Partnered Products. The following is a shortened list of LE products and services.

- Almaplex® industrial lubricant (1275)
- Duolec® Vari-Purpose Gear Lubricant (1600 series)
- Monolex® Penetrating Oil & Lubricant (2059)
- Quinplex® Food Machinery Lubricant (4025)
- H1 Quinplex® Penetrating Oil & Lubricant (4059)
- All Purpose Turbine Oil (4946)
- Monolec® Hydraulic Oil (6100 series)
- Monolec® R & O Compressor / Turbine Oil (6400 series)
- Multilec® Industrial Oil (6802)
- Almasol® Dry Film Lubricant (9200)
- LEAP Oil Analysis
- AMS Filtration
- Oil Safe
- Label Safe
- Des Case breathers



MG Pump #1



MG Pump #2



Pre AMS filter sample



After AMS filter sample

Thank you to Allan Andreyck, W R Grace reliability engineer, Dennis Morgan, AMS Filtration, and to Chris Nowlen, LE lubrication consultant (pictured), for providing the information used in this report.



Almaplex®, Duolec®, Monolex®, Quinplex®, Monolec®, Multilec® and Almasol® are registered trademarks of Lubrication Engineers, Inc.

Based on actual user experience. Individual results may vary. Not intended to supersede manufacturer specifications.

SIC 2819
LI70682 12-09