APPLICATION PROFILE

INDUSTRIAL HYDRAULICS

Paper Mill

Challenge: **FILTRATION EVALUATION TO ELIMINATE CYLINDER FAILURES**

Location: **MIDWESTERN USA**

> Often a paper mill wood yard will have a number of truck dump systems, each one designed to upend a tractor-trailer to dump a load of wood chips into a hopper/conveyer to convey chips to the next step in making paper.

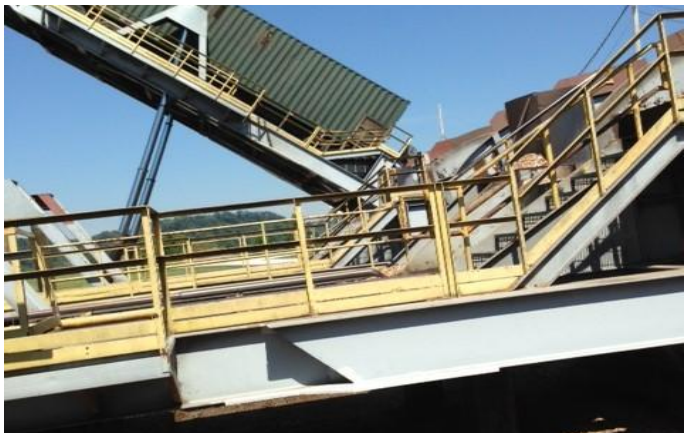
Each system consists of two 24ft hydraulic telescoping cylinders, power to extend and truck weight gravity to retract. The power unit consists of a 600gal tank with two 50gpm pumps at 2500psi that combine flow to extend the cylinders.

A paper mill in the Midwest who works with Flodraulic in fluid contamination control has five such systems. Problems with cylinder failure due to dirty fluid started to surface. Flodraulic was asked to recommend a filter system to solve the problem. Return flow filter options were discarded due to space limitations and the cost of large filters required to handle the flow. The cylinders came down with truck weight twice as fast as the extension stroke raising the truck. After much discussion and calculations it was decided to go with pressure filters on one system as a trial.

Recommended and installed were two Pall UH319CE2420Z pressure filters rated at 6100psi. The filters were installed on the outlet of each 50gpm pump. The filter elements used were UE319KN20Z, rated 7 micron, beta 2000. The element is designed to achieve a fluid ISO cleanliness of 13/09/04, which is extremely clean for an industrial application.

Customer Benefits:

- Increased system cleanliness levels
- Longer element service life
- Maintenance savings
- Lower pressure drops
- Reduced energy costs
- Reduced downtime
- Reduced element change costs
- Continuous oil recirculation
- No cost for evaluation / recommendations



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