



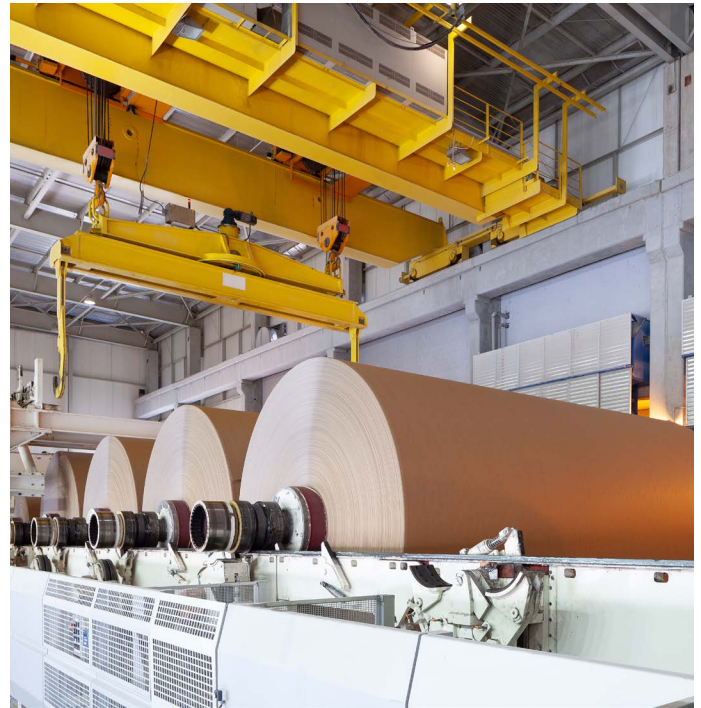
# Filter Elements Help Paper Mill Achieve 75% Cleaner Oil

How to Cut Dirt and Save Money for Your Business



## The Problem

A large paper mill was living with the extra expenses of main-bearing lube filter elements that were reaching their terminal DP change limit on an average 3-week interval. This was disruptive and costing the company over \$70,000 in filter expense. This mill never stops, running all day every day, so staying operational is a top priority. In addition to frequent filter changes, the mill was missing its 17/15/12 ISO fluid cleanliness code, the maximum limit for particles 4u and larger. The actual average ISO fluid cleanliness code for the mill was 18/15/12, which is twice the particle limit allowed in the system. High ISO codes, coupled with frequent filter changes are not just expensive, but also leave the paper machine vulnerable to even more costly breakdowns and downtime.



## The Solution

The company upgraded to Hy-Pro's HP619L40-6EB filter elements with the goal of improving cleanliness to a 17/15/12 or better and extending element life. The change interval was extended to 4 weeks with ISO codes trending to 17/15/12. To fully support our customer, Hy-Pro experts followed up with consultation about change frequency and longer element life associated with achieving lower ISO codes.

# Hy-Pro assisted with Filtration Education





## The Results

As a result, the paper mill achieved a filter lifespan of 11 weeks after validating that the Hy-Pro upgrades maintained a 16/14/12 ISO code as differential pressure increased up to terminal DP, with a whopping 75% reduction of dirt in this critical paper machine main lube system.



18/15/12



16/14/12



## The Conclusion

The paper mill achieved their cleanest lube oil ever, reducing dirt by 75% with filters that last 4x longer! With cleaner oil, the company will realize more predictable production and greater uptime by avoiding unplanned, contamination-related failures. The mill saved \$58,000 annually on the cost of filter elements and maintenance hours, and helped achieve their sustainability objectives. In addition to providing a superior performing filter element, Hy-Pro educated key stakeholders to shift the mindset from a time-based change to realizing the element's full useful life.

At Hy-Pro, we work tirelessly to help our customers achieve greater efficiency and sustainability, and exceed expectations. Let us show you how together, we can realize amazing results.

Oil Changes

**3 weeks** → **3.5 months**

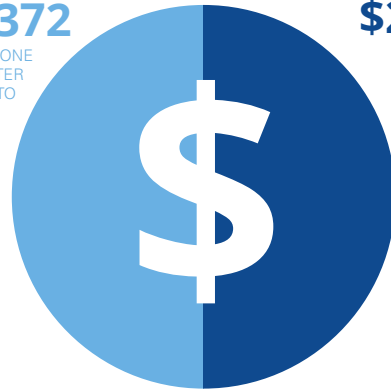
**75%** reduction of dirt  
↓

**\$29,372**

TOTAL YEAR ONE SAVINGS AFTER SWITCHING TO HY-PRO ELEMENTS

**\$28,764**

TOTAL YEAR TWO SAVINGS WITH HY-PRO ELEMENTS & RECOMMENDED DP CHANGE OUT SCHEDULE



**\$58,136**

ONGOING, TOTAL YEAR AFTER YEAR SAVINGS USING HY-PRO FILTER ELEMENTS & NEW CHANGE OUT PROCESS