



Rebuilding the roll finishing of existing paper mills

– what does it mean?

Pesmel provides rebuilding services to modernize paper mills' roll finishing operations to meet today's requirements.

By rebuilding existing machinery its lifetime can be extended or its handling capacity restored to its original level.

Usually, the need arises when outdated equipment causes a bottleneck in the production line. We at Pesmel provide rebuilding services for roll conveyors and roll packing lines. Typically, a rebuild project can be, for example, robotization of existing machinery, including a safety upgrade for the whole line. As a result, machine efficiency improves significantly and additionally, due to less manual operations, the risk of accidents at work is reduced. Replacing worn-out parts with improved technology features will give old machinery better runnability.

Different ways to modernize finishing area equipment at a paper mill

We provide modernization services for our own machinery, as well as roll handling machinery from Valmet and other suppliers. There are several ways to modernize the equipment at a paper mill. Our experts can evaluate which option is the most cost-efficient for the customer: rebuilding the existing equipment or replacing it totally with new machinery. Modernization is often needed when a mill's production, e.g. paper grade, capacity, or roll dimensions are changing and the existing machinery needs to be upgraded to meet new production demands. A good >>

example is the ongoing trend of paper mills changing their paper grade from white grades to board. Usually this means changes in roll size and packing method. All in all, whatever the need is, it can be solved by either rebuilding or replacing the existing system with new machinery.

We offer modernization solutions for many needs:

- Changes in production capacity
 - » Rolls are wider or narrower than before
 - » The amount of rolls to be handled has changed and the material flow needs to be improved to avoid bottlenecks
 - » The quality of package needs to be improved to avoid, moisture damage for example

- » The production capacity needs to be improved by minimizing disruptions and improving runnability.

- Improvements in automation level and reducing manual operations, e.g. by adding robots
- PLC update (when there are no spares available to old PLC), including the user interface update (PC or Touch Panel). For example, new diagnostics can be added to speed up problem-solving in the old machinery.
- Changes in roll transportation needs within the mill, e.g. conveyor system changes in connection with a new winder.
- Upgrading existing machinery to meet today's safety requirements and standards.

The required know-how of the supplier

In order to be able to provide the optimal rebuild solution, the supplier needs to know the customer's processes inside out, as well as the existing system in the mill. They need to know and understand how the machinery meets production requirements.

Thanks to their long history and in-depth expertise in the paper industry, our specialists at Pesimal have the capability to see the big picture at a mill and make the most suitable suggestions and plans. Usually, the customers know what the outcome needs to be, and when Pesimal's specialists are used to evaluate the requirements, the best solution will be defined in co-operation with the customer. •



A rebuild case

Pesimal carried out a rebuild project for a paper mill in 2016. The old kraft wrapping machine dated from 1986 and was partly manually operated. Pesimal's specialists evaluated the amount of modification needs to meet the new production, and together with the customer ended up with a solution where a completely new wrapping line was built. When compared to a major rebuild of the existing wrapline, this was a more efficient solution with regard to the mill's internal logistics and total costs. The rebuild improved production efficiency in all aspects releasing one operator to take up other duties.