



BEST PRACTISES FOR TISSUE MILL ROLLS MAINTENANCE

Maintenance managers and supervisors in a tissue mill are required to work to budget and cut the costs of maintenance wherever possible. An efficient management of rolls maintenance, of press rolls in particular, significantly contributes to reducing costs and the risk of emergency stops.

What to do to reduce rolls maintenance cost:

Respect the time limits.

A press roll on a tissue machine should run for a maximum period of 12 months. Regardless of whether you see any sign of malfunction, take down the press after 12 months and send it to maintenance. We calculate this period based on the performance of the inner components, for instance the nozzles of the press are easily obstructed by fibres and need to be cleaned to avoid overheating of the sealing and subsequent failure.

Perform a complete overhauling of the press.

After 12 months, you need to dismantle and thoroughly check all of the press components. Replace all consumables. Thoroughly clean every part, especially the nozzles. Well-kept nozzles are your insurance against very costly emergency stops. Inspect all parts to check their integrity, wear conditions, joint tolerances, and replace them if they fail to meet the requirements.

Regind the press cover.

After 12 months, the cover needs regrinding, in order to ensure that the press is working with the correct crown profile. If the profile is not right, you may start increasing the pressure on one side or the other, or altogether,

in order to make up for an unbalanced profile. This will end up affecting the final quality of the product as well as overstressing the cover and shortening its life.

Take good care of your bearings.

Inspect, clean and lubricate the bearings. Water may have infiltrated inside the bearing, and while it may not have damaged it during operations when it is suspended in oil, it will damage the bearing during your maintenance stop, because as it cools down it condensates and starts its corrosive action against the metal.

Check the integrity of the shell.

After 12 months, it would be advisable to perform non-destructive testing (liquid penetrant and magnetic particle testing) on the shell and the journals to rule out the presence of micro cracks or damages that may result in major fractures in the future.

Ensure proper storage conditions.

As you get ready to store your rolls for a period of approximately 12 months, you should bear in mind that you need to do maintenance right after you take down the roll from the machine and before you store it for months in the mill. After a thorough overhauling, store the roll indoors to avoid thermal shocks throughout the seasons. Make sure that you lubricate the bearings properly. Rotate the roll of 90 degrees every 15 days. This will get the oil moving inside the bearing and will allow for the section subject to load at the bottom to change regularly. It will also avoid deformation of the rubber cover as well as of the shell, which is subject to its own load.