From shutdown to top-quality paper IN JUST NINE DAYS!

ANDRITZ is fully aware of what downtime means to its customers in the paper and board industry – however, to keep ahead in a competitive environment, rebuilding, updating, and refurbishing equipment is essential. The secret is to plan well in advance, shut down quickly, get the work done fast, and then be up and running again as soon as possible.

Family run German containerboard producer Papierfabrik Adolf Jass has come a long way since it was founded in 1960 when it made just 12 tonnes of paper a day. It is now a thriving business with two mills, Fulda in Hesse and Rudolstadt/Schwarza in Thuringia, producing some 1 million tonnes of top-quality containerboard from 100% recycled fiber.

As one of the leading producers of containerboard in Germany, the management at the company is well aware that good quality products demand only the best production equipment. After some years of demanding performance on its PM4 test liner machine at its Fulda mill, it was recognized that it was time for a complete rebuild of the headbox that had become heavily corroded.

The machine itself has a width of 5.5 m and a design speed of 800 m/min, producing some 250,000 tonnes of 150 – 300 g/m² testliner per year.

REBUILD SPECIALISTS SPRANG INTO ACTION

There was no immediate need for action, but as long-term operation with high equipment availability was no longer guaranteed, the customer decided upon a well-coordinated, well-planned overhaul project for this highly critical equipment.

ANDRITZ was contracted to carry out the rebuild of the headbox in December 2019 and the task had to be done as quickly as possible as the overhaul was scheduled to be completed after only nine days.

With the clock ticking, ANDRITZ first began work on removing the headbox from the machine and transporting it 700 km to its workshop in Graz, Austria. On its arrival the service specialists in Graz sprang into action to completely disassemble the headbox, sandblast and paint all the steel parts, clean the stainless steel and bronze parts with a ceramic blast, plane and grind the slice and apron lip, and refurbish all the actuators used to adjust the profile.

Some new elements were also added, including a new headbox table made of stainless steel to replace the corroded one.

After the flurry of activity in Graz, which also included the assembling and adjusting of all the components, the virtually new headbox was then transported back to the mill by truck, installed on PM4, and put back into operation. The machine began producing high-quality testliner almost immediately – after just nine days!

"ANDRITZ succeeded our high expectations regarding the ambitious time schedule as well as the professional project handling. Right after the start-up, we were able to produce top-quality paper," says Michael Habeck, Technical Director, Papierfabrik Adolf Jass.

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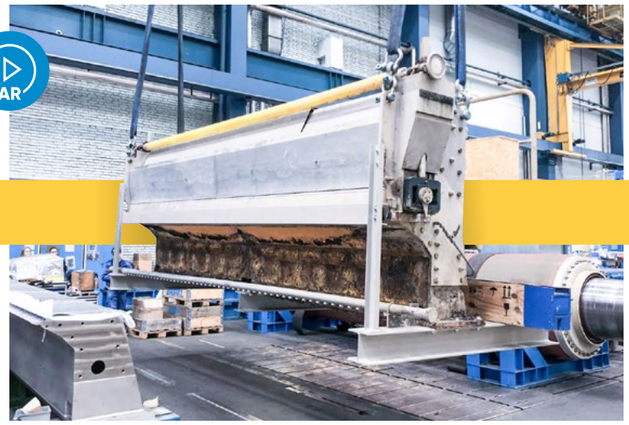
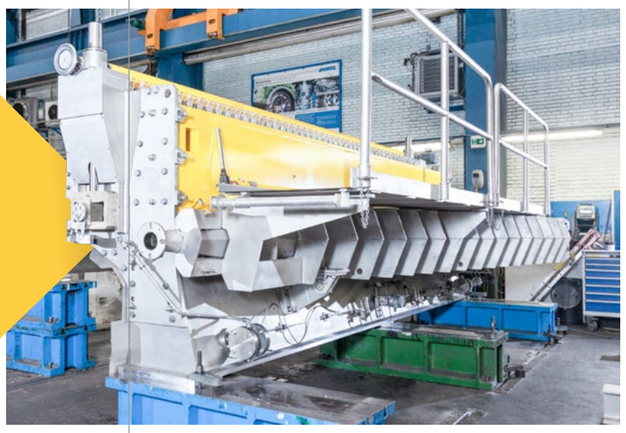
AR View video footage of this report in our augmented reality App!

FOR FURTHER INFORMATION SEE PAGE 3

The virtually new headbox back in operation



Before headbox overhaul



After headbox overhaul

ANDRITZ HIGH PERFORMANCE HEADBOX OVERHAUL

Over time, headbox performance deteriorates as the forces of corrosion, damage to the slice and apron lips, wear on adjustable components, and defects in the heating channels take their toll. When this happens, sheet quality and operational safety can be impacted. The decision then becomes "replace" or "recondition"?

A COST-EFFECTIVE ALTERNATIVE TO REPLACEMENT

ANDRITZ offers an annual service to inspect, recondition and, when necessary, rebuild your headbox to restore performance, extending the lifetime of your initial capital investment.

RESTORE SHEET PROFILE

Headboxes for tissue, paper, and board machines work in very demanding environments, including heat, moisture, and vibration. By installing new heating channels, repairing or entirely replacing the slice and apron lips, exchanging various worn-out elements, and conducting final precise adjustment of all of these components, a stable sheet profile can be restored, thereby enhancing performance, extending lifetime and improving sheet quality.

OPERATIONAL SAFETY FOR A LONG PRODUCTION PERIOD

Heavily corroded parts, for instance the rear panel and the apron body, can lead to unsafe operation or unscheduled shutdowns. If such damage is detected during our annual service, the parts are replaced to ensure operational safety. Routine service checks on your paper machine should translate to high production, stable MD and CD profiles, and operational safety, ANDRITZ headbox reconditioning service is for all brands of headboxes. Reconditioning requires not only an intimate knowledge of the equipment, but also a deep understanding of the process. During inspection, each component must be evaluated to determine whether it can still be used or should be rebuilt or replaced.

SERVICE HIGHLIGHT – LIP REPAIR

Since any damage to the slice or apron lip, even the smallest scratches, will have a negative impact on MD and CD sheet profiles, ANDRITZ offers a lip repair service as an alternative to costly replacements. Specialists will perform all the operations, for example leveling, planning, grinding, shaping, and deburring, to bring the slice and apron lips back to specifications. These operations can be performed directly on-site in the mill or in our Graz workshops, depending on the extent of the damage.