



Customer Success Story



The Challenge: Damaged Embosser Unit

When a large tissue converter began experiencing severe wrinkling and baggy edges in one of their paper towel lines, they knew they had a serious problem, but were not sure where in the line the issue was occurring.

Because the product was tracking tight to one side and bagging severely on the other when running from the embosser to the winder, the mill team believed that the embosser unit was the problem. They were so convinced this unit was causing the issue that they were planning to purchase and install a new embosser.

OASIS Called In

Joel Farnum, Regional Manager of the [OASIS](#) West Service Centers in CA and WA, initially met with the maintenance manager from the mill to discuss having OASIS inspect the major components of the line prior to the arrival of the new embosser. Additionally, OASIS was asked to provide a quote on the installation and alignment of the new unit.

Originally, the two main goals the mill hoped to accomplish were:

- Solve the wrinkling and baggy edge issues in order to gain 4" of product width
- Improve overall machine speed

OASIS Troubleshoots Paper Towel Line

Using a [laser tracker](#), Dave Fox, OASIS Metrology Engineer, inspected the alignment of the major components of the line including the unwinders, the embosser unit, the paint line and the winder. Additionally, Mr. Fox inspected all idler rolls (roughly 30 to 40 rolls). Also known as transitional rolls, idler rolls carry the web from component to component.

During the inspection, Mr. Fox found that the major fixed components were all well within an acceptable tolerance. However, he found that there was significant misalignment in many of the idler rolls. In fact, one roll was out 5/8" because of a severely bent mounting bracket. This particular roll is of great importance to the process due to the amount of wrap and the length of draw between the two components. Ultimately, this misalignment was creating the baggy edge as the product was going into the winder. When Mr. Fox met with the mill team to discuss his inspection data, it was decided that OASIS would come back to align all idler rolls.

Idler Roll Alignment

Again using a laser tracker, Mr. Fox and OASIS field service engineers, Mike Shirley and Ken Endean, made the adjustments by aligning all idler rolls within an acceptable tolerance. Additionally, they worked with the mill machinist in order to modify the bent bracket of the severely misaligned roll so that the roll could be properly aligned.

The Results

Since the roll alignment, this mill has seen a major improvement in this line. The wrinkles and baggy edges have been eliminated and the mill has been able to increase machine speed. The most impressive result of the alignment project however, is that **the mill was able to avoid purchasing and installing a new embosser**. A significant cost savings to be sure.

The mill was so pleased with the results that the mill is in discussions with OASIS to inspect two of their additional production lines.

Conclusion

Unfortunately, regular maintenance and roll alignment is often an afterthought in many converting facilities. As seen in this mill, idler rolls and other rolls that support or place the web can have a major impact on the process. Some idler rolls have a great deal of wrap and others may carry a long draw from component to component. The proper alignment and maintenance of these rolls must be considered as part of an overall machine maintenance program.

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