

# PAPER MILL RESOLVES BELT ISSUES WITH ENGINEERING EXPERTISE AND EDUCATION

## CHALLENGE ▼

A major paper mill depended on a vacuum pump for its production processes, but faced frequent, costly belt failures. Annual spending on replacement belts ranged from \$35,000 to \$50,000. Belts were failing every three to six months, often being replaced without using proper tensioning tools or methods. The rapid wear and regular complaints from staff raised doubts about the reliability of the belts and signaled underlying mechanical problems.

## TIMKEN BELTS SOLUTION ▼

To address the persistent failures, technical experts from the Timken Belts team provided on-site assistance during a scheduled belt replacement. Using specialized diagnostic tools such as sheave wear gauges, Laser Align and Frequency Finder tools, they thoroughly examined the drive system. Their inspection revealed that severely worn sheaves were the root cause of the problems. After sharing their findings and recommendations, the mill replaced the faulty sheaves and installed new Timken® belts, using correct alignment and tensioning procedures.

## RESULTS THAT MATTER ▼

By resolving the mechanical issues and applying best practice installation methods, the mill dramatically improved the reliability of its vacuum pump. At time of publication the new belts had operated flawlessly for six months—doubling to quadrupling previous belt life. The risk of unscheduled downtime was dramatically reduced. Considering the plant's downtime cost of \$25,000 per hour, and estimating three avoided events per year, an annual savings of \$75,000 could be realized, solely from enhanced reliability. Additionally, the direct cost reductions and improved business continuity is significant. With annualized cost savings of \$76,800 and a yearly business value of \$50,000, the total documented value (TDV) reaches \$126,800.

\$75,000	+	\$1,200	+	\$600	+	\$50,000	=	\$126,800
Annual Downtime		Annual Belt Replacement		Annual Labor		Annual Business Value		TDV



Timken® belts are part of The Timken Company's growing portfolio of engineering bearings and industrial motion products. Timken Belts manufactures premium-performance power transmission belts that help keep industry in motion and the world more productive.

Performance Driven. **Performance Proven.**

[www.timkenbelts.com](http://www.timkenbelts.com)