

LINCOLN INDUSTRIAL'S AUTOMATED LUBRICATION SYSTEM KEEPS DONOHUE RUNNING SMOOTHLY

When Donohue Industries' Lufkin, TX, paper mill had too much unplanned downtime and lost production, employees tried repeatedly

to find the problem and a solution. The plant's four paper machines produce around the clock, and the maintenance crew kept everything running as efficiently as possible. They consistently followed an exact manual lubrication timetable for more than 100 critical bearings on each machine, but despite efforts, problems persisted. Grease breaks on PM No. 1 and a couch roll bearing failing regularly on PM No. 2 led to costly repairs and lost production. Safety also was an issue because workers had to lubricate high-speed machines while they were operating.

The problems were solved with one automated product—custom-designed Lincoln Industrial Centro-Matic lubrication systems.

Before Centro-Matic, the mill's "oilers" manually lubricated hundreds of points on its four paper machines, greasing each bearing as often as three times a week. Manual lubrication often inevitably leads to an ongoing cycle of over- and under-lubrication, causing premature bearing wear. In addition, bearings squeeze out excess lubricant, which can fall onto paper as it's formed, causing the "grease breaks."

The solutions to Donohue's lubrication problems involved more than the right system. A "team approach" involving Lincoln Industrial's local distributor to the mill, a district sales manager, and additional Lincoln spe-

cialists assisted the mill in evaluating all options available, with the primary objective of finding an efficient and productive solution.



Donohue's Tom Berry, Will Cox, Glenn Cook, and Paul Machac formed the core of the maintenance team that improved lubrication practices at their Lufkin, TX mill.

When Donohue decided upon the Centro-Matic grease lubrication system, Lincoln installed two systems on PM Nos. 1 and 2 in 1996. The system on PM No. 1 includes a pumping station, controller, injectors, and piping, and it lubricates once per hour. The system on PM No. 2 features a System Sentry II controller servicing two zones: the couch roll bearing every 15 min and the other bearings once each hour.

The mill is very satisfied with the systems. There is less downtime because the grease breaks have been virtually eliminated, and the couch roll bearing works smoothly. In addition, the systems paid for themselves quickly.

"Based on how often we had to change the couch roll bearing

before, the Centro-Matic system on PM No. 2 paid for itself in less than six months," said Paul Machac, maintenance supervisor. "We've had substantial savings, dropping from the major costs we had each year to a couple of barrels of grease."

"The savings have been across the board—an increase in production, a decrease in maintenance costs, plus improved safety conditions," said Will Cox, mechanical supervisor.

After experiencing the benefits of the systems, the mill had two additional Centro-Matic systems installed on PM Nos. 3 and 4 this year.