

# Case Study: Paper Mill

## HYDRA-JUST®



### INDUSTRY

Pulp and Paper

### CUSTOMER

A paper mill in Georgia was having trouble sealing their digester pumps.

### BACKGROUND

The abrasive content and caustic nature of the raw white liquor resulted in chronic leakage. Leaking media was just one problem though; the company was wasting resources and losing money because of the amount of flush water that was being introduced to the system. Any water that entered the media had to be removed through mechanical means or by evaporation.

### CHALLENGES FACED

The mill had tried mechanical seals, but found that they lasted no longer than packing with flush bushings. In the digester, they had to use a flush rate of 40 gpm, approximately 9.5 million gallons per year, to keep the pump operational. At a cost of \$200 per million gallons to use the water and an additional \$1,800 per million to remove and treat it, the mill was spending \$21,000 annually on this one pump.

### SOLUTION AND BENEFITS

At this point the mill decided to see if the HYDRA-JUST® Sealing System could solve both problems. After installing HYDRA-JUST®, the mill operated with 75% less water and extended their mean time between maintenance by over three times. In all, the mill was able to realize almost \$17,000 in savings.

### PERFORMANCE COMPARISON

Annual Profit Impact

	Current Practices	Garlock's Solution	Profits Gained
Water consumption costs	\$2,100	\$525	\$3,145
Evaporation costs	\$18,870	\$4,717	\$14,152
Sealing element costs	\$390	\$775	(\$385)
<b>Annual Operational Impact</b>	<b>\$21,360</b>	<b>\$6,017</b>	<b>\$16,912</b>

  

	CURRENT	PROPOSED	PROFIT GAIN
\$21,360			
\$16,912			
\$6,017			



For more information, please visit:  
<http://www.garlock.com>