

CASE STUDY

Customer	<b>Florida Pulp &amp; Paper Mill</b>
Project	<b>Bottom Circulating Pump</b>
Solution	<b>HYDRA-JUST™ Rotary Seal</b>

## Performance Comparison Annual Profit Impact

### Florida Paper Mill

A large paper mill in the Florida panhandle had a major problem. The bottom circulating pump on their digester was down for seal replacement far too often and if it couldn't run, then neither could the digester.

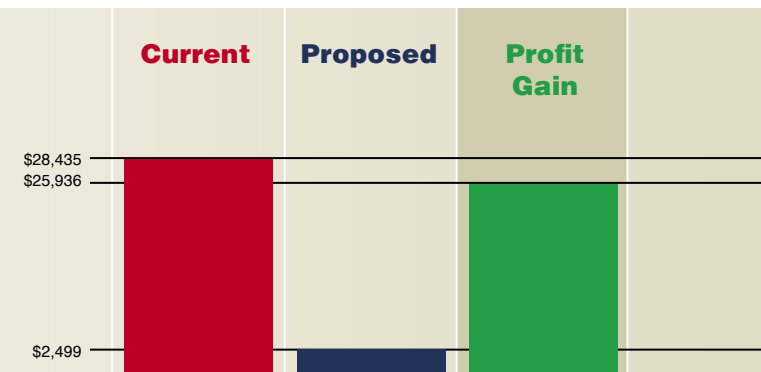
Originally, the mill was using Kevlar® and GFO® packing to seal the pump, but this would only last 3-6 weeks. In addition to lost production time due to rapid seal failure, the mill had to deal with white liquor leaking out of the pump and the waste of having to use vast amounts of flush water to maintain the packing.

A mechanical seal was installed with the hope of fixing the problem. However, due to fluctuations in the mill's seal water pressure, the mechanical seal failed in less than a week.

That's where Garlock and the HYDRA-JUST™ system came in. The mill went from monthly failures to annual maintenance, dramatically cut their water use and realized significant operating savings. In fact, the HYDRA-JUST™ seal worked so well the mill installed an identical seal in their top circulating pump.

KEVLAR is a registered trademark of DuPont  
GFO is a registered trademark of Gore and Associates

	Current Practices	Garlock's Solution	Profits Gained
Costs due to lost production	\$14,479	\$1,207	\$13,272
Costs for the Seals	\$5,052	\$550	\$4,502
Costs for Associated Parts	\$1,800	\$150	\$1,650
Labor Costs to Install	\$7,104	\$592	\$6,512
<b>Annual Operational Impact</b>	<b>\$28,435</b>	<b>\$2,499</b>	<b>\$25,936</b>

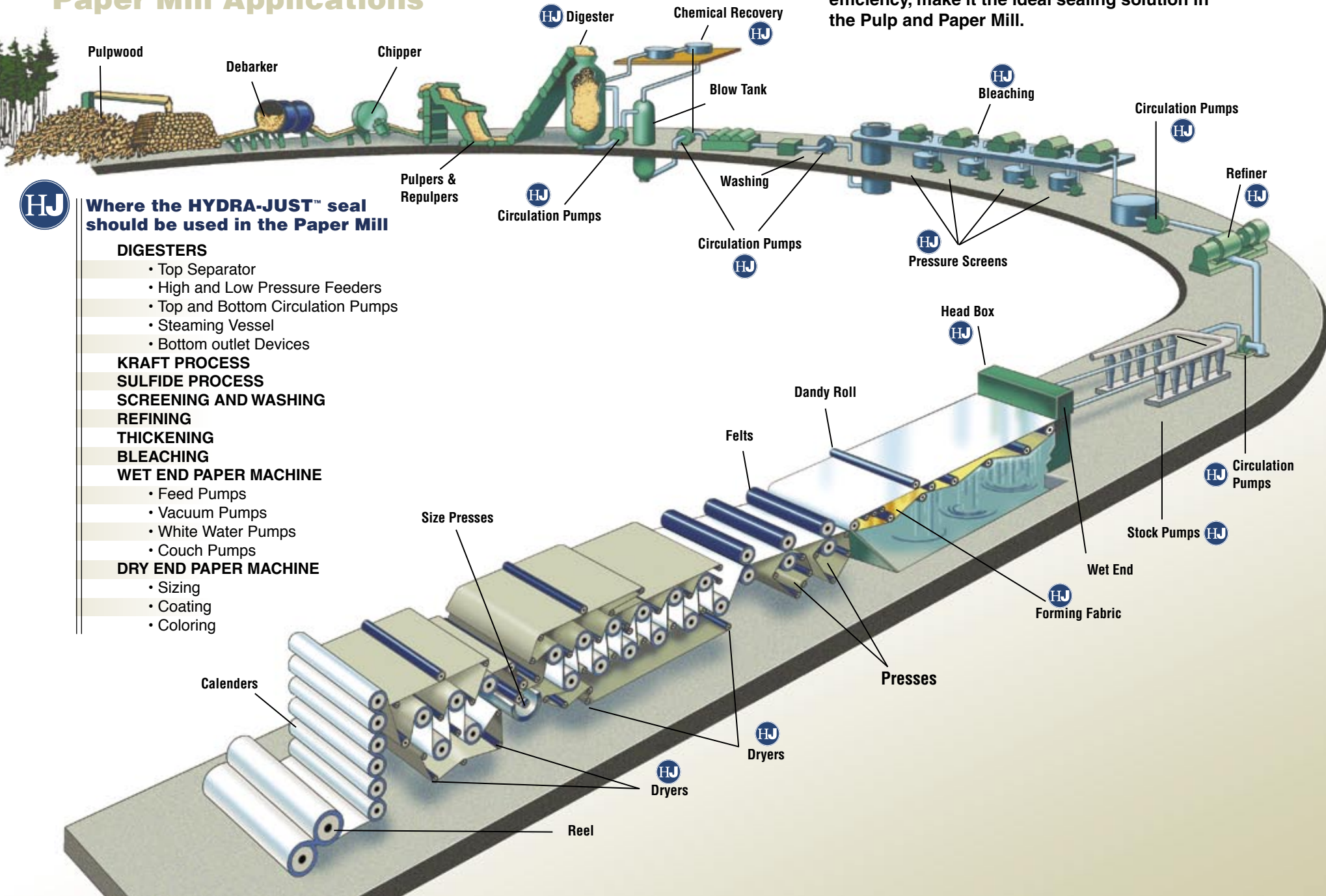


# HydraJust™

## Paper Making Process

### Paper Mill Applications

The HYDRA-JUST™ system's unmatched abrasion and chemical resistance, coupled with its water efficiency, make it the ideal sealing solution in the Pulp and Paper Mill.



**Where the HYDRA-JUST™ seal should be used in the Paper Mill**

**DIGESTERS**

- Top Separator
- High and Low Pressure Feeders
- Top and Bottom Circulation Pumps
- Steaming Vessel
- Bottom outlet Devices

**KRAFT PROCESS**

**SULFIDE PROCESS**

**SCREENING AND WASHING**

**REFINING**

**THICKENING**

**BLEACHING**

**WET END PAPER MACHINE**

- Feed Pumps
- Vacuum Pumps
- White Water Pumps
- Couch Pumps

**DRY END PAPER MACHINE**

- Sizing
- Coating
- Coloring