

# Paper-making: It's round-the-clock work

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There are coffee filters, oil filters, grease filters and air filters; filters that make your french fries crisp and your vacuum cleaner bag less porous. Without filtration, your beer would be grainy and your scented stationary would be ink-soaked the moment you put a pen to it.

Making filtration paper—a highly specialized, low-volume manufacturing item—is in the hands of nearly 100 employees at the James River-Rochester Paper Co. plant.

The bustle of activity is evident at the plant 24 hours a day, seven days a week. Four crews alternate three production slots.

"Our papers end up all over the world," said James Rogers, vice-president and general manager of James River-Rochester.

"We use a common paper-making process, but are unique in that we blend specialty pulps to give the end product desired characteristics the customer needs."

PLANT MANAGER William Kirkland compares the paper-making process to mixing a cake batter: Begin with a basic recipe, add some of this, some of that, maybe some color, and you've got it.

Testing the product is an on-going operation, conducted under tightly controlled conditions. Because of the individuality of each product, only one "job" is run through the paper machine at a time.

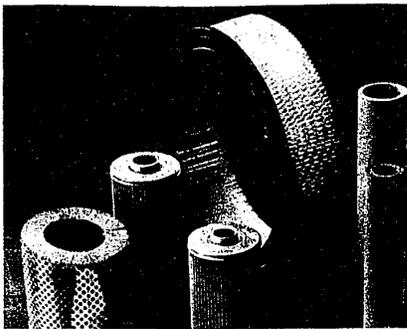
Paper makers see their end products roll off the one paper machine, a combination of holding tank, conveyor belt, drying drums and rolling devices.

What goes into the machine is a watery substance called slurry; what comes out is nearly dry paper that is immediately rolled and sent for further testing.

Because of the highly technical quality of each product, any product not meeting exact specifications during testing is not shipped. Instead, the



The paper mill in 1930, with Melvin Metro and Thad Perkins of Rochester (at right) in the window.



Filtration is a medium—and a large product line.

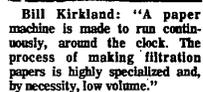
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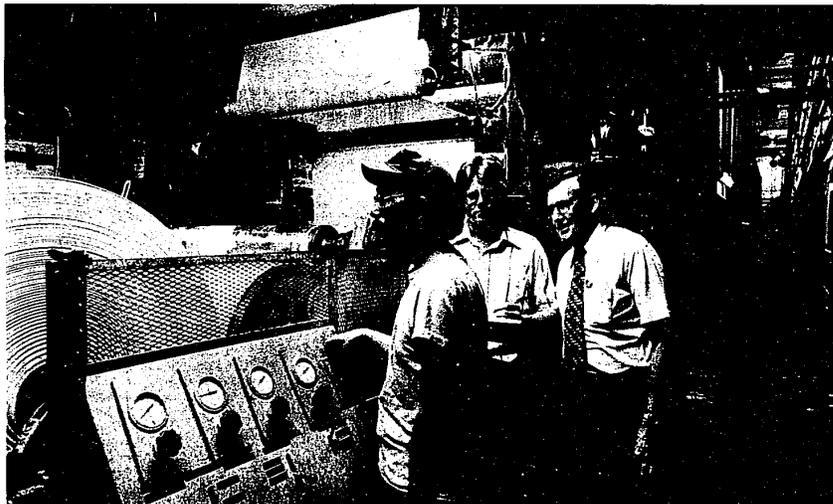
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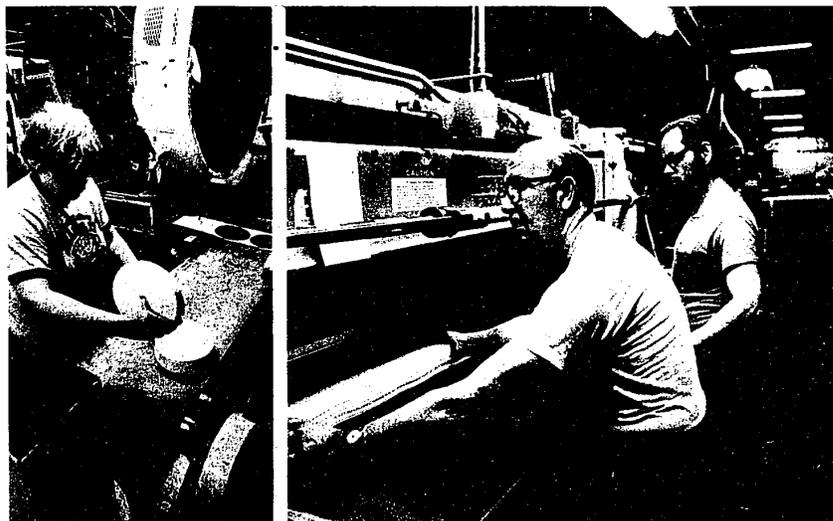
James Rogers: "Not only are we one of the world's largest buyers of bulk pulp, we are one of the largest specialty paper companies in the United States."



Bill Kirkland: "A paper machine is made to run continuously, around the clock. The process of making filtration papers is highly specialized and, by necessity, low volume."



Father, son and nephew team, Jim Phillips (right), son Steve (center) and nephew Gerald have more than 40 years combined service in the mill.



Karen Nieman (in photo left) packs the paper once it's punched to size, while Archie Stewart (left, in photo right) and Clarence Smith cut the paper to size.

pecadillo is corrected, the batch rerun and the process renewed.

The "basic recipe" Kirkland mentions is defibering bulk pulp of chemical content, mixing and mashing it to proper consistency and reforming it in sheet form.

Use of the bulk pulp is one reason why the onerous odor found in the area of many paper companies is not found near James River-Rochester.

"We aren't a pulp mill," Rogers said. "In pulp mills, the odor comes from the chemical cooking of trees. James River buys market pulp, already processed. Not only are we one of the world's largest buyers of bulk pulp, we are one of the largest

specialty paper companies in the United States."

ALTHOUGH OTHER James River plants across the country produce other types of specialty paper, filtration products continue to be the primary medium manufactured in Rochester, Rogers said.

The bulk pulp is the primary ingredient in the process, followed closely by water. Kirkland estimates that more than 100,000 gallons of water are discharged daily from the plant. More than one million gallons are recycled.

Dried pulp is placed in water tanks for 25-40 minutes for defiberization. Fibers break down and combine with other pulp types before they are channeled through refiners, where the proper consistence (solids to water content) is achieved.

The batter-like mixture then is pumped into the paper machine, molded flat over a monofilament sheet, pressed into sheet form and the largest portion of the water is forced out and recovered.

The watery paper moves along the filament through a presser, where thickness is determined. From there it flows through 20 drying drums, which remove all but a small percentage of the remaining water.

Throughout the process, a computerized monitoring system takes continual readings of the product's thickness, density and fiber content.

JAMES RIVER Corp. of Virginia was founded in 1969 and acquired the

Rochester plant assets in January 1977 from King-Seely Corp. Rogers said the acquisition was good for plant operators, the employees and the specialty paper business.

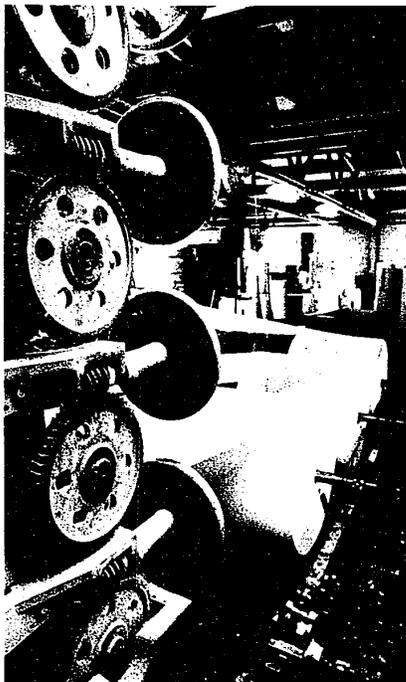
While King-Seely was diversified into many small, consumer industries, James River is strictly specialty papers, Rogers said. The business has larger purchasing powers for raw materials and "a top management that fully understands the operations," he said.

"Like many of our employees, we're dedicated to the specialty paper business. The employees have been very pleased with the new ownership," Rogers said. "We can build for the future by upgrading the operation and reinvesting into it."

He said the paper manufacturer plans to stay in Rochester many more years. Originally the site of the Mack Flour Mill, built in 1824, the location is accessible to both Paint Creek and Clinton River, which has made it a desirable spot for papermaking through the years.

The first Rochester Paper Mill operated 1857-1875, when it was destroyed by fire. A new building was erected on the original stone foundation, constructed of brick and slate, and still stands, although completely modernized.

King-Seely bought the company in 1967, turning assets over to James River in 1969. The company has plants all over the country, including Peninsular Paper Co. in Ypsilanti, and James River-Rochester, Adams Division, in Adams, Mass.



The nearly dry paper rolls off the machine after beginning as a watery slurry.

Staff photos by Doug Bauman