

Expert Witness



Seaman Paper Company

Clear sailing: Seaman navigates the niches

Clear sailing: Seaman navigates the niches

**Peter Manca, Kevin Mallet,
and Ron Herrin** (AstenJohnson)
at the reel of PM2



Through calm seas and storms, a privately held lightweight specialty paper producer has used vertical integration and long-term supplier partnerships to navigate its way into profitable niche markets.

Seaman Paper Company competes on a global scale to supply lightweight and value-added specialty papers. In addition to its Otter River mill in Massachusetts, Seaman operates a global supply chain with operations in Asia and Europe. What has enabled Seaman to survive as a domestic manufacturer are the strong relationships that Seaman has developed with its suppliers to control costs and maximize efficiencies.

Seaman purchased the Otter River mill in 1946. George Jones II, returning from the Navy during World War II, was asked to manage the one-machine mill. Under his leadership, the mill was upgraded and a second machine was added. The machines were configured to produce the highly technical grade of one-time carbonizing paper.

Specialty production

As the demand for carbonizing fell off in the 1980s, Seaman Paper began developing value-added products for retail packaging, consumer products, and industrial markets – enhancing its capabilities through acquisition and internal growth. Currently, the company converts 90% of its production into a variety of finished products via its in-house expertise in sheeting, folding, coating, slitting, waxing, and printing.

During the last 15 years, Seaman has expanded its papermaking, converting, and distribution on a global basis. “We have grown globally through continuous innovation of our product line with a strong focus on sustainable manufacturing”, says Gene Reardon, Vice President of Manufacturing.

In a “typical” week, the Otter River mill runs a variety of grades and colors with their own unique specifications, according to Peter Manca, Assistant Superintendent. “Sometimes we’ll run four grades in a single day on a single machine”!

“We have separate stock prep and white water systems for each machine”, says Kevin Mallet, Superintendent. “Our pulpers, beaters, and tanks are small by design so that we can change over to a new grade fast and clean

up for the next run. Chemical additives are typically added at the machines, and our transition periods are measured in minutes. Chemical suppliers tell us that we can't do what we're doing – until they come here and see it for themselves”.

Long-term supplier relationship

The Otter River mill operates two machines producing up to 100 t/d of machine-finished or machine-glazed lightweight papers. The furnish is a mix of virgin and recycled fibers. Both machines have Fourdrinier formers and run a wide basis weight range.

“This mill is unique in many ways”, Reardon says. “A lot of companies talk about people being their most important asset. But here, it's not just lip service”.

Reardon came to Seaman about nine years ago from Republic Paperboard in Oklahoma, a manufacturer of gypsum wallboard facing paper. Prior to that, he worked with Glatfelter in the U.K. (specialty papers) and Ahlstrom (filtration papers). “I've had the good fortune to work with several outstanding individuals and mentors. I felt it was the right time in my career to help develop and mentor some younger people in the industry, and give some of my knowledge back. So, it was a good fit for me to join Seaman Paper”.

That process and machinery knowledge is very important since there is very little automation at the Otter River mill. Reardon explains, “We rely on experienced human operators for proper setup, quality production, and even things like color-matching from run to run. It's very hands-on here. We also rely heavily on the experience and hands-on assistance from our top supplier-partners”.

One of those top partners is AstenJohnson. Even the veterans working at the mill can't remember when AJ first came in as a supplier of paper machine clothing. Ron Herrin, AJ's Sales/Service Representative for the region, confirms that in his 21 years with AstenJohnson, Seaman Paper has been a consistent and good customer, and that relationship pre-dates him.

“AJ would not be one of our preferred suppliers unless they delivered good products”, explains Kevin Mallet, Superintendent. “Equally important is the expertise and

service they provide. We view them as an extra set of eyes and ears to help us run our machines the best we can”.

Like many mills, Seaman Paper likes to keep its options open and chooses not to single-source. “I like to have a primary supplier and a backup just in case there is a delivery issue”, Mallet says. “We make our decisions based on price, performance, and service, and price is not the most important consideration. But it seems that over time, AJ is winning more and more positions on our machines”.

The Otter River mill started years ago with AJ dryer felts, specifically the MonoTier series, where AJ is well-proven. Next came forming fabrics, such as PrintStar. “We're getting good formation and runnability with PrintStar, and fabric life is consistent”, Mallet says. “The fabric has an ArmorTec treatment that improves cleaning. With all the colored dyes we use, the treatment really helps keep the dyes from filling in on the wire, minimizing cleanup and transition time to a new grade”.

Most recently, the mill switched to AJ's press felts for the pickup position on PM1. “We've been asking AJ to supply us with a seamed pickup felt for the bottom position for years”, Manca says. “Unfortunately, our length (44 ft or 13.4 m) was too short for them to manufacture. When Ron first approached us with an idea to trial their new FlexFlow X fabric, with a seam specifically for tissue, we were skeptical at first because didn't want a fabric that would mark the sheet. However, that has not been an issue. The FlexFlow X is the best seamed press fabric we have ever run in terms of seam marking”.

Herrin explains that the FlexFlow-X press fabric is a seamed press fabric engineered specifically for tissue machines. “We made a step-change with this product”, he says. “It has a compressible structure for quick break-in and an open design for easy cleaning. We did a lot of work on our pilot machine before releasing this seam, and today my customers tell me that it is the best seam in the industry for tissue applications, where sheet marking is major potential quality problem”.

“We also achieve excellent life out of this fabric”, Mallet says. “Normal life was about 50 days from other suppliers. The first time we ran FlexFlow X, it ran for 80 days”.



More than fabrics



Gene Reardon, VP of Manufacturing

“When I first came here, we were doing business with a lot of machine clothing suppliers”, Reardon says. “Too many to have solid relationships with. Frankly, I was not that familiar with AstenJohnson before I joined Seaman, but AJ has worked on the relationship to truly become an extension

of our operations team. Ron is here quite often and knows our setup, products, and people well”.

The turning point, according to Reardon, was when AstenJohnson brought its FlexFlow X press fabric to the mill. “We wanted and needed a seamed felt for our machines and for our grades”, he says. “AJ would not have much of an opportunity to grow with us if they couldn’t deliver what we needed. They did with the FlexFlow X design and it has really made a difference”.



Herrin inspecting press fabric on PM2.



Roll wrapping after the slitter

“We see Ron on a frequent basis and appreciate the support he gives us”, Mallet says. “If we encounter a problem or require anything special, he can bring in an AJ expert to help us. One thing I can say about AJ is that their depth of experience is reassuring. There are experts in all our supplier companies, but AJ seems to have more of them on staff. If we need them, we call them, and they are here. That’s what we are looking for from our supplier-partners”.

Manca recently attended a session on papermaking at AJ University (AJU) in Charleston. “It gave me a good overview on forming, pressing, and drying and the various fabric requirements for each section of the machine”, he says. “It was also an opportunity to meet papermakers from other mills as well as the AJ experts. The informal discussions were as valuable to me as the classroom sessions”.

This ability of AJ to talk “papermaking” and not just “machine clothing” is a value-added to Seaman Paper, according to Mallet. An example was the reconfiguration of the dryer section on PM1. “We had four dryer felts on PM1, with two of them in the top section”, he explains. “It was a nightmare to seam up a new fabric on the catwalk at the top of the machine – not to mention extremely hot if we needed to do something in a hurry”.

Herrin came up with a solution to put the first and second top sections together by removing three rolls and changing the wrapping configuration. The end result was going from four positions to three. “It’s been a complete success as we can now seam our dryer felts from a lower, more accessible location”, Mallet says. “Also, we have less inventory to carry, which saves us money”.



Drying section of PM1, reconfigured by AJ to eliminate one dryer fabric (see main article)

“One thing I can say about AJ is that their depth of experience is reassuring. AJ seems to have more experts on staff. If we need them, we call them, and they are here. That’s what we are looking for from our supplier-partners”.



Kevin Mallet, Superintendent



"The FlexFlow X is the best seamed press fabric we have ever run in terms of seam marking."

Peter Manca, Assistant Superintendent



Mallet, Herrin and Manca inspect forming fabric on PM1.

 **PrintStar™**

 **FlexFlow™ X**

www.astenjohnson.com

 **ASTENJOHNSON**