

Kivanç Tekstil sun, earth, wind, water...

Kivanç Tekstil's renewable business model based on nature

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INTRODUCTION:

Now, recovered wood fiber converted into packaging board joins a sustainable portfolio in textiles & energy. Since the 1950s, Kivanç Tekstil has been an entrepreneurial leader in textiles, emerging in the 1980s as a woven fabric supplier to the fashion industry, known for its integrated spinning, weaving, and finishing processes. Leading global brands value the consistency of their high-performing textiles.

Following in the tradition of their father, Hacı Mustafa Kivanç, who founded the business by making quilts, the second generation of Kivanç brothers continues to advance textiles with a deep focus on sustainability. Equally important, however, is the completely new business of containerboard made from recycled fiber. They are also generating more energy than they require from solar, wind, and biofuel sources. Soon, they will achieve zero emissions.

Starting up their new business in boardmaking in late 2024, the PM1 greenfield "brown" packaging mill has a daily capacity of 1,000 tonnes and production speed of 1,100 meters per minute.

The state-of-the-art Old Corrugated Containers (OCC) line features three stock preparation lines, followed by a containerboard machine that produces a range of high-quality testliner, special packing grades and fluting grades. A notable uniqueness is the way they create specialty offerings with AFT's POM stock preparation system, giving Kivanç a competitive advantage in strong, lightweight grades.

Says Faruk Özserbetçi, Mill Director, "To deliver unique products to customers in Turkey and nearby countries, our strategy was to start fresh with a greenfield mill, designed to make entirely new sustainable grades with flexibility.



Image 2: Ali Karagol, Ramazan Tekin, Faruk Özserbetçi, and AFT rep Efe Sendag atop the POM back ply tank. Says Özserbetçi, "AFT's ability to save water and energy, combined with maximizing fiber performance, is much appreciated."



Image 1: Zeki Kivanç, (Center front) Vice Chairman, one of four sons of the founder Hacı Mustafa Kivanç, in the picture frame to the left, and Faruk Özserbetçi, Paper Mill Director (left), and Sedat San, CFO, pride themselves in a strategic sustainable focus on the future focus for their customers, employees, and citizens of this emerging southern region of Turkey.

There are no references for us at Kivanç, because we have taken an entirely new approach to building grades.

Channeling streams of fiber to the headbox in four distinct flows, sometimes including MFC (Micro Fibrillated Cellulose) puts us at the forefront in the marketplace. Choosing AFT's POM system for our greenfield mill, combined with design features for specialty grades, was a bold decision.

To sum it up, customers view our products as meeting their needs and consistently exceeding expectations."

According to Ramazan Tekin, Production Director, "Well known for compactness and lack of redundancy of silos and other traditional equipment, Kivanç saw value in having considerable space around each part of the AFT stock prep system. We consider this a safety benefit for operator ease, providing us with room for expansion in the event of a potential second containerboard line."

AFT deliverables include a complete screen room with MaxFlow screens, a POMix stock processor to feed the paper machine, a POMp degasser, and POMLock drop legs. The mill's sustainable focus will benefit from this system, which is more compact, more flexible, and results in a cleaner operation with reduced waste and downtime.

Kivanç History

– and Partnership with AFT

Fiberline and Greenfield PM1 start-up October 2024

- Fiber is primarily recycled OCC, FSC virgin fiber is an option, and MFC
- Containerboard:
50% Corrugated-Fluting
50% Linerboard-Testliner
- Unbleached & uncoated
- 1,000 TPD



Complete POM system and more from AFT for two layer paper machine

- 2 x POMix stock processor system
- 7 MaxFlow multi-stage screening system ahead of the Headbox
- (2) POMp Degassers
- POMLock Drop Leg Collection system
- LC Cleaner System (part of a multi-stage low consistency cleaner plant for top and bottom)
- Project Engineering to fully optimize and reduce energy and water consumption
- Training, installation check, and commissioning / Startup Service

No waste pays off

Adds Özserbetçi, "Our POM system provides us with headbox profiles, orientation, and basis weight profiles that are entirely different from the norm. POM Mixers achieve different kinds of flow. Then comes the bold and tricky thing... our headbox has four different flows to produce specialty grades."

According to Tekin, "Winder trim is only 10 mm, compared to the typical 50 mm. Our competitive edge with the paper edge is that we have near-zero waste."

Notably, the use of MFC enhances strength, while maintaining a lighter weight.

How can Kivanç run so well, right from the start?

"We sought out a dream team to plan our containerboard mill from conception to completion, and then perform at a high level of runnability and flexibility," says Zeki Kivanç. "We also brought in proven suppliers to go beyond traditional techniques."

We expected a willingness to innovate and to help our new team optimize to the maximum. We also recruited ambitious, technical, and production-savvy local people. Best of all, it worked.



Image4: Compact POM has never looked smaller within all of this space! That's the design concept of the Kivanç mill – room for easy maintenance, safety, and expansion.

Kivanç received fast payback from their two POM degassers improving nearly every step of the production process.

POM Benefits:

- Less chemicals, defoamers, and retention aids
- Fewer sheet breaks, less broke to reprocess
- More stable pressure to the paper machine
- More capacity – improved wire drainage and forming
- Improved system cleanliness
(as air carries dirt, stickies, bacteria, fines)
- Improved strength (more fiber-fiber bonding)
- Better fines retention in the sheet
- Lower energy consumption
- Fast start-up, faster grade changes (less off-grade paper)



Image 5: Ramazan Tekin, Production Director, says, "Because of our POMp Degasser and other POM components from AFT, we waste nothing in the trim of our specialty containerboard grades. We found a way to deliver four distinct streams of stock to the headbox, and this gives our customers a competitive advantage, such as strength at lighter weights."

The team matters

Combined with strategic suppliers, the Kivanç dream team has hundreds of years of experience. A strong understanding of the latest technology available allows them to innovate and create new sustainable opportunities.

After all, Kivanç has always focused on a future that builds in change, adaptability, and low waste. This requires smart people, dedicated to high performance every minute of every day."

Image 6: (Below) Mill leadership includes Faruk Ozserbetci, Paper Mill Director (left), Ramazan Tekin Production Director, and Ali Karagol Technical Director.



Kivanç Tekstil

– a creative powerhouse for future sustainable success

With over 75 years of history, Kivanç Tekstil is an industrial enterprise that offers sustainability-focused solutions across multiple sectors, including textiles, energy, and containerboard.

Their beliefs include:

- Adding value to nature through recycling and innovation.
- Future-focused, environmentally friendly production in every field, from textiles to energy to containerboard.
- Creative transformation of traditional businesses—producing investment income for the future.
- Achieving zero CO2 emissions in all businesses, and minimizing water usage.

In 2024, they started up a greenfield recycled (OCC) containerboard mill, venturing into boardmaking, which they had never done before.

Following an in-depth study of recycled fiber and potential for specialty linerboard grades, they leaped into a somewhat parallel business to textiles and alternative energy. Kivanç Kağıt, the board-making unit, is quickly proving itself to be an innovative and customer-oriented company.

The author: Martin Koeppenick

Martin has traveled the world for over twenty years, capturing stories in words and images about sustainable success.

Specializing in innovations in paper and packaging to reduce energy, save water, recycle, and maximize the value of fiber.

He has visited over 200 mills and headquarters on all continents.

