



REVOLUTIONARY CONVERSION TO KRAFT PAPER PRODUCTION

SUCCESS STORY

From an idled graphic paper machine to innovative packaging paper production at HEINZEL Steyrermühl.

An aerial photograph of the HEINZEL Steyrermühl paper mill complex, showing large industrial buildings, storage areas with logs, and surrounding greenery. The image is partially covered by blue triangular overlays.

ANDRITZ

Steyrermühl: A blend of industrial heritage and natural beauty

Steyrermühl, located at the entrance to the Salzkammergut region, boasts a rich history in paper production, dating back over 150 years.

The HEINZEL GROUP's paper mill in Steyrermühl, along with another in Laakirchen, plays a crucial role in the local economy, providing employment and driving technological advancements. The location's proximity to the Traunfall waterfall adds to its scenic charm.

While industry thrives in Laakirchen, the town also boasts a rich agricultural heritage. The area north and east of the Lambach-Gmunden railway line is dedicated to agriculture and forestry. This railway line follows the historic route of the Gmunden-Linz-Budweis horse-drawn railway, Europe's first continental railway, adding a touch of historical significance to the region.

This combination of industrial heritage and natural beauty makes it a unique and vibrant place to live and work. The success of the HEINZEL GROUP's paper mills is a testament to the area's rich history and ongoing commitment to innovation and sustainability. The family-owned HEINZEL GROUP, is one of the most important pulp and paper producers in Central and Eastern Europe, trading in pulp, paper, wastepaper, and packaging solutions worldwide.



The Traunfall: Just minutes from the Steyrermühl mill, the Traunfall is a scenic waterfall on the Traun River, reflecting the region's natural beauty.

STEYRERMÜHL PM6

The existing machine was rebuilt and upgraded with state-of-the-art technology to meet future requirements.

Advancing through innovation and sustainability

As part of the HEINZEL GROUP's long-term vision, HEINZEL Pöls—through its premium brand STARKRAFT — is transforming the newly acquired Steyrermühl mill into a center of excellence for sustainable packaging paper and renewable energy. With a bold strategy, a tight timeline, and a clear commitment to innovation, the project is setting new standards in efficiency, environmental responsibility, and regional impact.

HEINZEL Pöls, a division of the HEINZEL GROUP, is a leading producer of high-quality market pulp and packaging paper. Located in Austria, HEINZEL Pöls is known for its innovative and sustainable paper manufacturing processes. The company produces a variety of products, including kraft paper and specialty papers, catering to diverse market needs while maintaining a strong commitment to environmental stewardship.

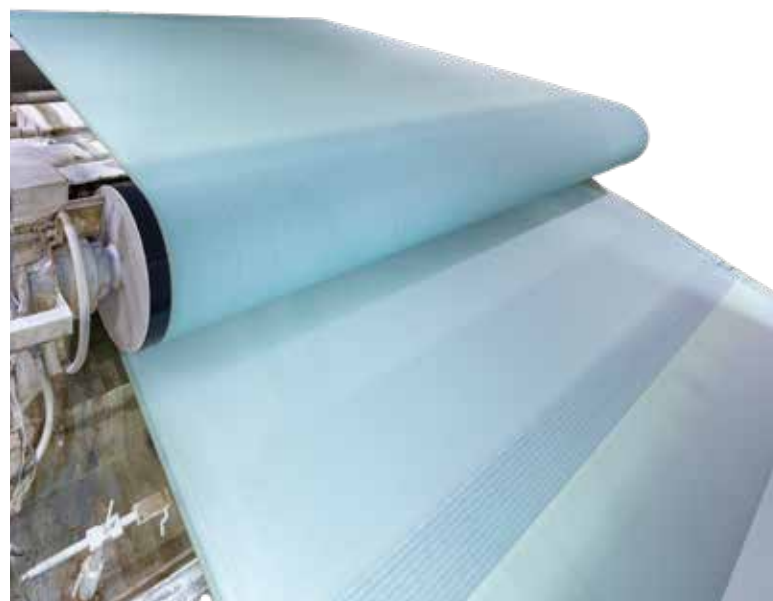
The Steyrermühl mill, part of the HEINZEL GROUP since January 1, 2024, is situated in Upper Austria. It operates alongside the neighboring Laakirchen mill, forming a hub for sustainable packaging papers, renewable energy, and wood processing. The mill produces brown and white kraft paper, with a planned production volume of 150,000 metric tons per year.

Additionally, it operates a sawmill and a waste-to-energy plant, contributing to HEINZEL GROUP's ambitious climate targets and circular economy initiatives.

STARKRAFT, a brand of HEINZEL Pöls, is one of the world's leading producers of high-quality bleached kraft paper. With millions invested in state-of-the-art technology over the past decade, Starkraft is renowned for its strength, flexibility, and commitment to sustainability. The brand's advanced paper machines produce a wide range of kraft paper products, including bags, flexible packaging, and medical applications.

STARKRAFT's innovative approach and dedication to quality make it a key player in the global kraft paper market.

STARKRAFT produces paper on three paper machines at two sites in Austria. Its diverse product range includes both white and natural variations, catering to the needs of its customers with versatility and flexibility.



From vision to reality: Delivered on a tight timeline

The Steyrermühl paper machine PM6 is part of STARKRAFT, a business unit of HEINZEL Pöls, which has significantly expanded its kraft paper production capabilities, thanks to a ground-breaking partnership with ANDRITZ. This ambitious project involved converting the idled supercalendered (SC) PM3 at the Steyrermühl mill into PM6, producing kraft papers for sustainable, flexible packaging.

The timeline for this project was tight, and the startup curve correspondingly steep. PM6 reached, and indeed exceeded, its target speed of 1200m/min within a few months of startup. The ambitious timeline reflected the desire to seize market opportunities, which wait for nobody.

"This was a strategic decision within the group, based on the reality of an increasing market for brown and white kraft paper, the decline in graphic grades, and having identified an available asset at Steyrermühl that could meet the future requirements of this market," says Heinz Schnedl, CTO HEINZEL Pöls.

"We had to get ahead with production volumes and quality so as not to miss the round of budget discussions with our customers for 2025, and to ensure we were a first mover with this innovative technology."

The project was not without its challenges, including the integration of new and existing equipment and the need to ensure the stock preparation was flexible enough to produce a wide range of end products.

There was also the factor of personnel, as Siegfried Gruber, Head of Technical Planning, HEINZEL Pöls points out: "Our team had to switch from one running paper machine to another idled one (newsprint PM4 to the new PM6), coping with enforced downtime, different technology on a narrower machine, and also dealing with a far broader range of product specifications – having previously been operating within the narrower specification confines of graphic grades. In the end, we were fortunate to have retained so much expertise in-house alongside the work of the dedicated ANDRITZ team."

PM6 now has a design speed of 1200 m/min, a paper width at the reel of 6300 mm and a capacity of 150,000 tons per year. This strategic investment allows

STARKRAFT to produce up to 350,000 tons of kraft paper per year at their mills in Pöls and Steyrermühl, positioning it as a major player in the global market, and offering a full range of 20 to 120 gsm bleached and unbleached kraft papers.

In addition to the game-changing PM conversion, the ANDRITZ scope of delivery included upgrades of the stock preparation, approach flow, and broke handling systems as well as extensive upgrades of the automation systems (DCS, QCS, MMD), detailed engineering packages, mechanical erection, and an upgraded steam & condensate system.

KEY COMPONENTS

- PrimeFlow AT headbox
- PrimeForm TW shoe-blade gap former
- PrimePress X shoe press
- PrimeCal soft calender
- VIB SteamTech profiling system
- Upgrades and new components in stock preparation, approach flow, and broke handling
- Upgrade of the complete DCS system
- Process pumps

A long-standing partnership

The successful completion of this project is testament to the long-standing and fruitful partnership between HEINZEL GROUP and ANDRITZ. Previous collaborations include the conversion of PM10 at Laakirchen and the delivery of two new MG paper machines for the Pöls mill.

"This has been a highly challenging project," says Mario Wiltse, Corporate Director, Paper Technology at HEINZEL Holding. "It was complex and very intensive, with a short schedule to meet, a very steep startup curve, and a lot of discussion about what to retain from the old machine and where new equipment was required. And all this within an existing environment rather than a greenfield scenario. But thanks to skilled, experienced, and dedicated teams from Steyrmühl and ANDRITZ, we had a great startup despite the time pressure and technical challenges."

"It's always a more fluid situation when dealing with a rebuild," says ANDRITZ Project Manager Andreas Pfennich. "No matter the level of detail you might include in the project proposal, when the time comes to execute the rebuild or replace existing parts, there will be unforeseen technical aspects to handle. PM6 was no exception, but we were pleased we managed to adhere to the agreed schedule despite this."



"This was a strategic decision within the group, based on the reality of an increasing market for brown and white kraft paper, the decline in graphic grades, and having identified an available asset at Steyrmühl that could meet the future requirements of this market. We had to get ahead with production volumes and quality while making sure we were a first mover with this innovative technology."

HEINZ SCHNEDL
CTO, HEINZEL Pöls

FUSING TRADITION WITH
MODERN INNOVATION

Designed for the future of paper production, the new components provide maximum efficiency and high paper quality.

At its heart, a “first” in forming technology

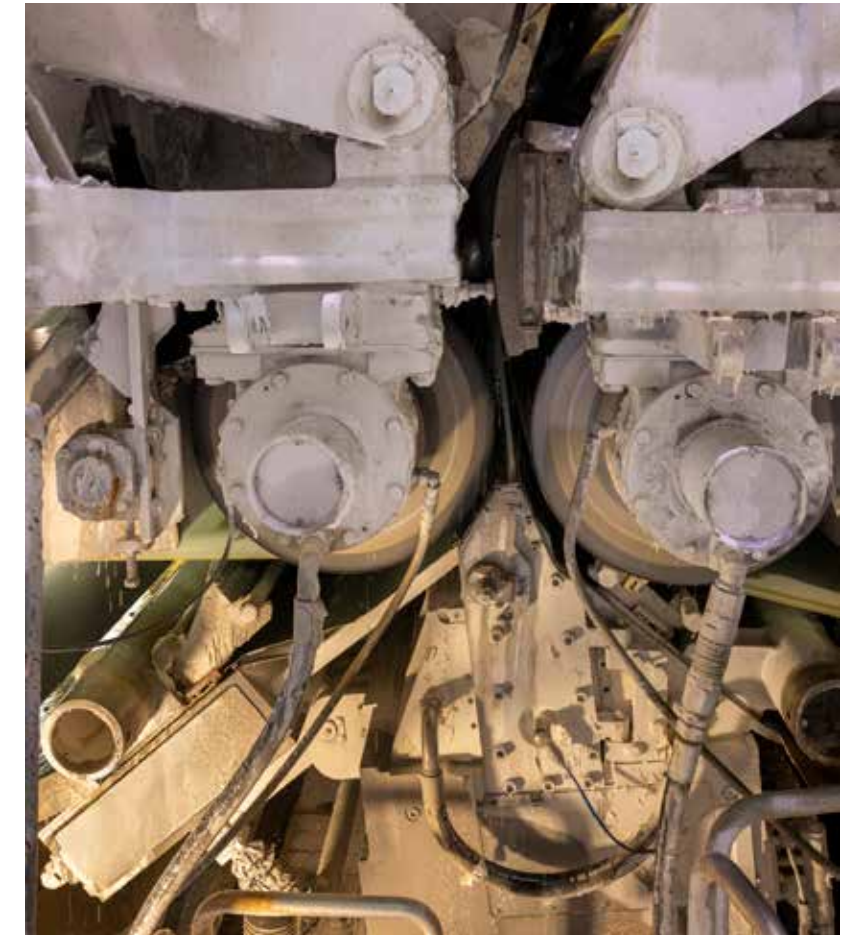
One of the standout features of this project is the use of the first gap former designed specifically for kraft paper production.

“This project not only enhances HEINZEL GROUP’s production capabilities, but also underscores its commitment to sustainability, through energy savings and material optimization, and thanks to technological advancement in general,” says ANDRITZ Sales Manager Paper & Board, Christoph Draxler.

“ANDRITZ has proved itself to be a dependable, innovative partner through its ability to rise to the challenge of tailor-made solutions, while confirming its leading position in kraft and specialty grades. Despite necessary changes to the scope as the project progressed, ANDRITZ managed to keep to the original schedule. It was a project which required ANDRITZ’s highly-flexible team of experts to think out of the box, particularly when recommending which parts of the old machine to retain and rebuild, and which to replace entirely.”

The production of kraft paper usually requires a fourdrinier former, but PM6’s gapformer rebuild features a new, unique concept, proven in pilot trials, which is based on a pulsation-free impingement shoe of the *PrimeForm TW*.

This fully adjustable shoe-blade gapformer retains high flexibility in basis weights and grades, ensuring robust, yet forgiving operation. At PM6 in Steyermühl, it enables crucial, grade-specific paper properties with the lowest possible MD/CD ratios for both bleached and unbleached paper grades.

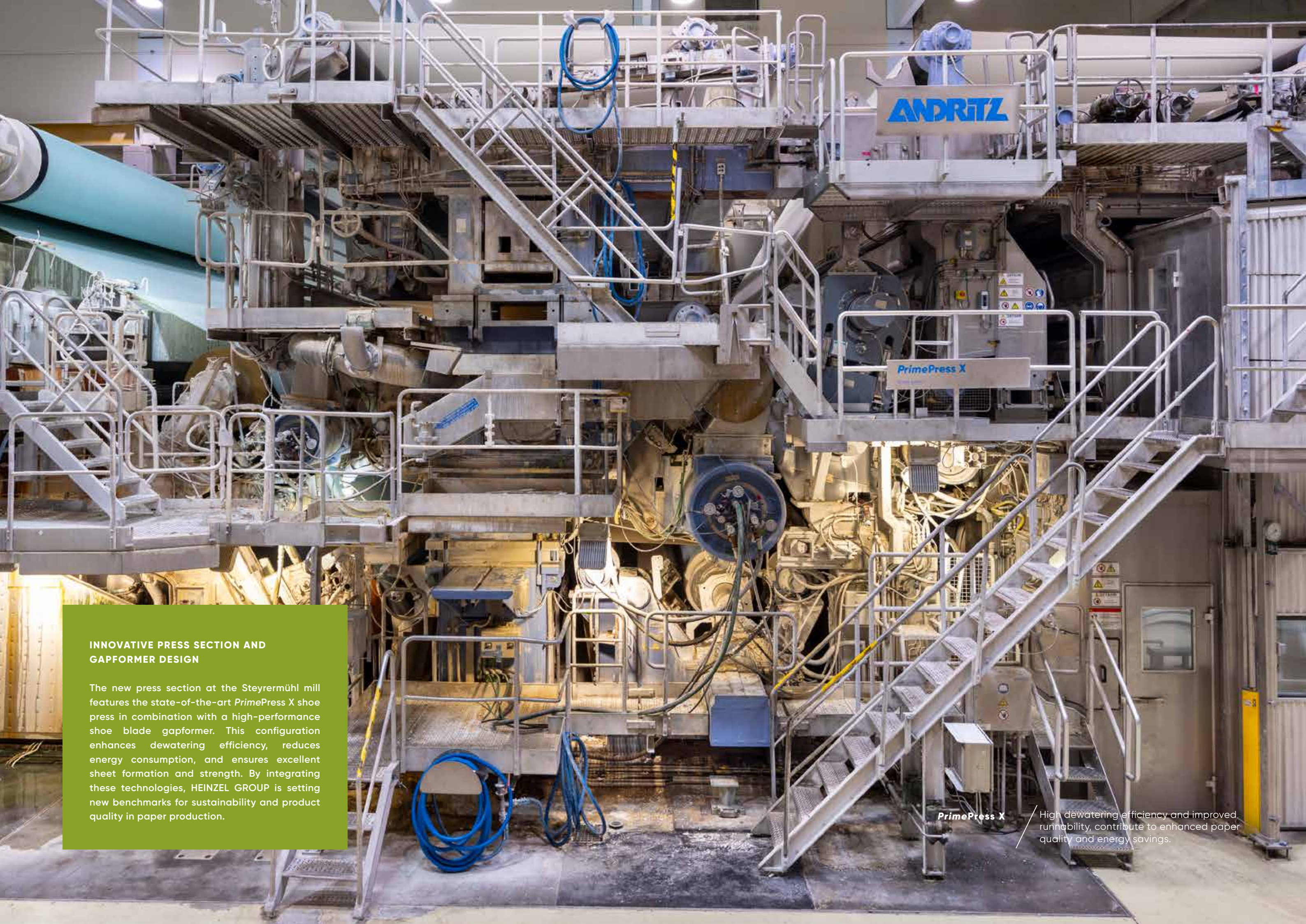


PrimeForm TW shoe blade gap former: flexible, high-performance forming technology adaptable to new lines or existing machines.

This is combined with a *PrimeFlow AT* headbox with dilution control for excellent cross-direction profiles and overall dimensional stability. ANDRITZ applied patented technology to give a truly pulsation-free impingement zone and adjustable geometry in the forming zone with variable wrap technology to allow grade-specific optimization and a very wide operating window. At the same time, use of a gapformer offers a step increase in energy efficiency, forgiving operation, and much higher speed potential than fourdrinier technology.

OPTIMIZED FORMATION AND EFFICIENCY

The *PrimeFlow AT* headbox and *PrimeForm TW* shoe blade gap former work in tandem to deliver precise control over fiber distribution and sheet formation. This advanced combination ensures superior paper quality with enhanced efficiency, reducing energy consumption while maximizing production reliability and consistency.



ANDRITZ

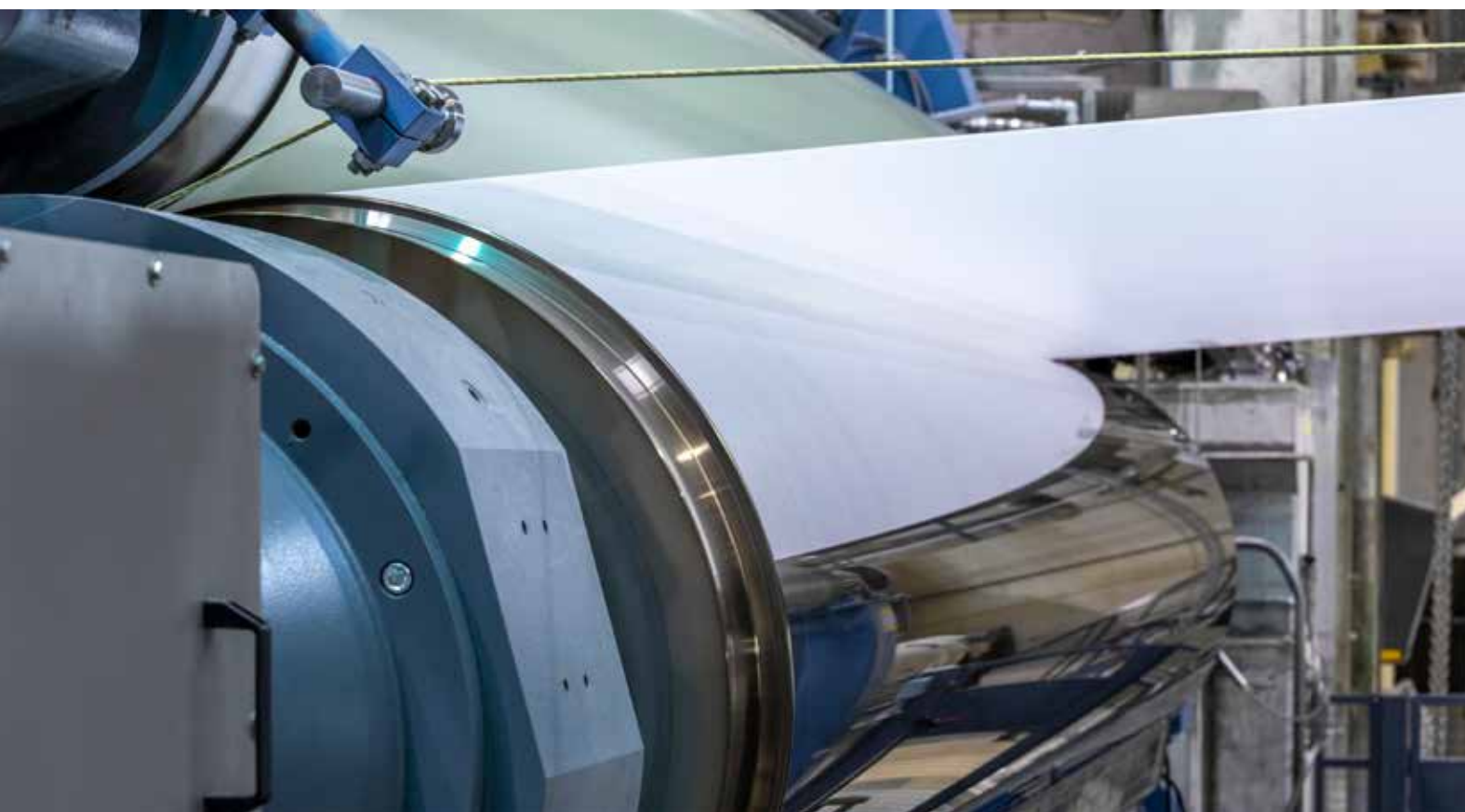
PrimePress X

PrimePress X

High dewatering efficiency and improved runnability, contribute to enhanced paper quality and energy savings.

INNOVATIVE PRESS SECTION AND GAPFORMER DESIGN

The new press section at the Steyrmühl mill features the state-of-the-art *PrimePress X* shoe press in combination with a high-performance shoe blade gapformer. This configuration enhances dewatering efficiency, reduces energy consumption, and ensures excellent sheet formation and strength. By integrating these technologies, HEINZEL GROUP is setting new benchmarks for sustainability and product quality in paper production.



PrimeCal Soft calender: A well-proven design optimized for the highest speeds and widths, offering safe operation, low maintenance, quick roll changes, and excellent vibration resistance for maximum machine availability.

Rebuilt for efficiency, quality, and future-readiness

From advanced press and calendering technologies to upgraded automation, steam systems, and pump retrofits, the Steyrermühl project sets new standards in energy efficiency, product quality, and operational reliability.

The combination of the ANDRITZ *PrimePress X* shoe press and the upgraded steam & condensate system has resulted in significant energy savings, while maintaining high quality production. The new ANDRITZ VIB SteamTech profiling system and the *PrimeCal Soft* calender technology, which replaces a multinip calender, further enhance the paper's surface quality, making it ideal for flexible packaging applications.

The project team identified the DCS, based on the Damatic Classic control system, for a substantial upgrade. This covered stock preparation, part of the wet end, drying groups, and the steam & condensate system, as mentioned above. Specifically, it included the DNA Operator Station, which includes a DNA Backup and AlarmServer, a twenty-client DNA Display Server, the GDCAD to DNA software upgrade, and the OPC UA Server. The network was upgraded, while the existing IO cards and application software from the XDi System were reused. ANDRITZ modified 50% of the existing application software, while upgrading the process station hardware and system software to the latest versions.



Automation & Digitalization upgrade: ANDRITZ updated system hardware and software to meet today's requirements.

Last but not least are the pumps – the beating heart of any process industry. ANDRITZ installed 10 new pumps and upgraded approximately 50 existing process pumps up to optimized energy performance with modified impellers, base frames and various additional components to meet the new operating specifications. In addition, ANDRITZ developed a conversion kit for the existing coupling guard to meet the latest compliance requirements. Using an adapter disc, the integration of the current coupling guard of the outstanding ACP pump series will be facilitated.

"At ANDRITZ, we further strengthened our leading position in flexible packaging paper technology development, having introduced a world-first technology, and succeeded in the execution of a project characterized by daily challenges and rewards."

Christoph Draxler
Senior Sales Manager Paper & Board at ANDRITZ

Steyrermühl's future

HEINZEL took over the Steyrermühl site from the Finnish paper group UPM on January 1, 2024. The Steyrermühl paper mill has a long tradition of producing high-quality graphic paper products, but ANDRITZ converted the former PM3 SC paper machine to produce sustainable kraft papers for the growing flexible packaging market. The rebuilt machine, now called PM6, will produce up to 150,000 tons per year of brown and white kraft paper in a range of basis weights, marketed under the established STARKRAFT brand.

The new kraft paper grades will be used to manufacture carrier bags and pouches, among other flexible packaging products.

With the Steyrermühl mill now producing high-quality kraft papers for packaging under the established STARKRAFT brand, HEINZEL GROUP is poised for continued growth. This project not only enhances its production capabilities, but also underscores its commitment to sustainability and technological advancement.



HEINZEL GROUP's Steyrermühl mill The Steyrermühl site also hosts a sawmill, renowned for its expertise and committed to responsible forestry.



DISCOVER OUR FULL-RANGE PORTFOLIO FROM FIBER PROCESSING TOPAPERMAKING

An outstanding paper product requires outstanding production – matched with the particular needs of raw material and final product. Discover the full-range portfolio from ANDRITZ: Excellent stock preparation that allows best fiber development according to furnish and with economical use of resources. *PrimeLine* paper machines that are a synonym for producing topquality tissue, paper, and board grades. Complete lines or single units, upgrades, and modernizations. Contact us and benefit from your individual package in papermaking technology.

AUSTRIA

ANDRITZ AG, Graz

p: +43 316 6902 0

paperboard@andritz.com

[ANDRITZ.COM/PULP-AND-PAPER](https://www.andritz.com/pulp-and-paper)

JOIN US ON SOCIAL MEDIA



All data, information, statements, photographs and graphic illustrations in this leaflet are without any obligation and raise no liabilities to or form part of any sales contracts of ANDRITZ AG or any affiliates for equipment and/or systems referred to herein. © ANDRITZ GROUP 2025. All rights reserved. No part of this copyrighted work may be reproduced, modified or distributed in any form or by any means, or stored in any database or retrieval system, without the prior written permission of ANDRITZ AG or its affiliates. Any such unauthorized use for any purpose is a violation of the relevant copyright laws. Due to legal requirements, we must inform you that ANDRITZ AG processes your data for the purposes informing you about the ANDRITZ GROUP and its activities. Find out more details about our data privacy declaration and your rights under the data protection legislation on our website: [andritz.com/privacy](https://www.andritz.com/privacy). ANDRITZ AG, Stattegger Strasse 18, 8045 Graz, Austria. MillStory_Steyrermühl_2/08/2025

