



ONE TISSUE MACHINE, VARIOUS CONFIGURATIONS

PrimeLineTIAC

ANDRITZ

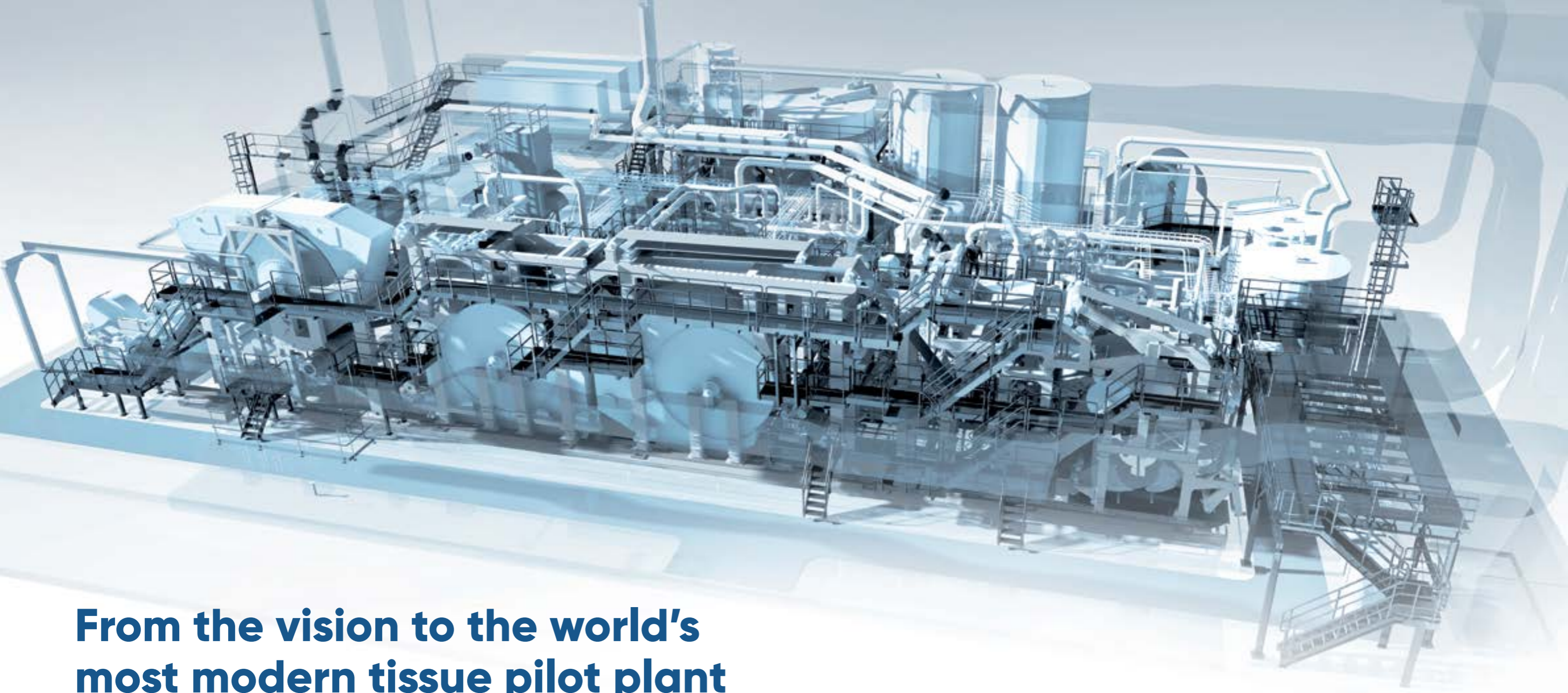


ENGINEERED
SUCCESS

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WATCH THE VIDEO
on our *PrimeLine*TIAC





From the vision to the world's most modern tissue pilot plant

Imagine a world in which everybody uses tissue! This does not seem unrealistic considering that tissue, unlike other paper grades, promises continuous growth of approx. 3.5% for the next few years.

The increasing demand will be met by existing tissue producers and their future investments, as well as by newcomers. Enhancements in production and end product quality will be a decisive success factor if these companies are to become or remain successful.

ANDRITZ has reacted to these future challenges and built the world's most modern innovation center for tissue, the *PrimeLineTIAC* – Tissue Innovation and Application Center, so that customers, suppliers, and R&D institutes can test and develop tissue solutions.

AT A GLANCE

- Pilot plant and laboratories
- For dry-crepe, textured, structured (TAD)
- All concepts are available as single machines
- 2,500 m/min design speed, 600 m working width
- 16 ft. Steel Yankee
- Two 14 ft. TAD drums, high-temperature hood
- Shoe press

"PrimeLineTIAC is a sophisticated place that brings together customers, suppliers, and R&D institutes to implement the tissue solutions of tomorrow."

FRANZ HARRER
Director Global R&D, ANDRITZ



Benefits: for tissue producers, suppliers, R&D institutes

BENEFITS FOR TISSUE PRODUCERS

You will have a unique opportunity to conduct trials with completely new technologies (follow-up machine developments) that have not yet been launched on the market, or with your own technologies. This gives you the chance to test these new concepts in advance and thus potentially gain a competitive advantage.

In addition, you can conduct trials to improve end product quality: on a headbox with 1, 2, or 3 layers, or to optimize your fibers and furnish, increase dryness, and reduce energy consumption. The testing possibilities include trials for pulp, chemicals, refining and clothing, different press concepts (suction press and shoe press), hot air, steam, and vacuum concepts. Simulated startups and training scenarios complete your trial portfolio.

The trials at the ANDRITZ *PrimeLineT* guarantee that the production process and the machine configuration is compatible with the raw material used, and that the end products will fully meet your and your end-customers' needs. The jumbo rolls that are produced under different conditions will be converted to enable a blind test with your end-customers in your market. ANDRITZ experts from research and development, stock preparation, tissue machine design, engineering and operation, automation, and pumps are looking forward to an extensive exchange of know-how.

BENEFITS FOR PULP SUPPLIERS

You can test your products and ideas on completely new tissue technologies (follow-up machine developments). And you will be able to test new fibers specially developed for tissue. In addition, you can conduct trials in which short fibers are substituted for long fibers.

The trials cover new products, end product and quality improvement, multi-layers, optimization of fiber, furnish, refining, and chemicals, as well as energy and fiber savings for your customers. You can even invite your customers for trials. The testing possibilities

include benchmark comparisons with the market to determine advantages that can be promoted and the disadvantages to be eliminated.

BENEFITS FOR CHEMICAL SUPPLIERS

In addition to the advantages offered to pulp suppliers, you can test new chemicals that are especially developed for tissue. The trials include coating to gain handfeel, bulk, tensile strength, and improved machine efficiency for your customers. Further trials with softeners and debonders are possible to gain handfeel and bulk with fiber savings for your customers.

The trials with wet and dry strength agent or enzymes improve tensile strength, while trials with dewatering agents help to increase dryness and gain energy savings for your customers. A chemical agent benchmark trial can be conducted to determine advantages and potential for improvement. And you can invite your customers to carry out trials as well.

BENEFITS FOR FABRIC AND ROLL COVER SUPPLIERS

In addition to the benefits already mentioned, you can test new roll covers that are especially developed for tissue production. Furthermore, you can test the formation and the limits of dewatering, dryness, and speed. Or perhaps you want to increase dryness and achieve energy savings for your customers, or improve the quality of your end product? Fabric benchmark trials can be used to verify the advantages and disadvantages of your market solutions.

BENEFITS FOR CONVERTERS

We can wind onto jumbo rolls, and the entire production process can be optimized further by means of different converting processes.

BENEFITS FOR VACUUM COMPONENT SUPPLIERS

Vacuum ring pumps and vacuum turbines are installed for comparison trials.

BENEFITS FOR R&D INSTITUTES

We are looking forward to an exchange of know-how and to hearing your ideas!



QUALITY

- Formation
- Tensile
- Handfeel (surface and structural softness)
- Bulk, caliper
- Absorbency cap and absorbency speed
- Structured and dry-creped



FIBERS

- Long and short fibers
- Virgin fibers
- Recycled fibers
- Bagasse
- Bamboo
- Straw



CHEMICALS

- Wet end
 - Wet strength
 - Dewatering
 - Softener / debonder
- Dry end
 - Enzymes
 - Coating



FABRICS

- Forming
- Pressing with suction press or shoe press
- Belts, sleeves
- Roll covers
- Structured fabrics
- New technologies



KNOW-HOW

- Pool of ANDRITZ experts and / or bring your own specialists



COSTS

- Fibers
- Energy
- Water
- Chemicals
- Fiber substitutes



ENVIRONMENT

- Fiber savings
- Recycled fiber
- Water savings and waste water treatment



TRAINING

- Operator training
- Maintenance training
- OPP - Optimization of Process Performance training (Metris)

VARIOUS OPTIONS AND POSSIBILITIES

You can conduct the trials either with the ANDRITZ experts or with your own team of specialists. You can bring your own pulp/chemicals/fibers, or you can use ours, or even a sample from the market for comparison. The pilot machine will be configured according to your needs! You can define the machine set-up and clothing. You can even produce different grades on the same day and optimize production. Of course, you will receive all of the optimized tissue samples so that you can show them to your customers. Due to the perfect

logistics network in Graz, we are able to import your fibers and transport your entire production (jumbo rolls, paper samples) efficiently back to you.

FINAL REPORT

Finally, you will receive a comprehensive report containing all of your trial results. This report will include graphs and spreadsheets with all trial data, as well as an assessment of the results, the conclusions, path forward, and recommendations.



Laboratories and R&D facilities

Explore our laboratories for extensive R&D! All of them feature a broad range of state-of-the-art measuring devices and optimally conditioned rooms for analysis and evaluations.

STOCK PREPARATION LABORATORY

The ANDRITZ stock preparation laboratory is able to investigate a broad range of physical and chemical processes. It's our daily business and passion to conduct research and development work by analyzing samples of various pulp types and sampling locations. These might come from the pilot plant or from the customer – so to say your tool to perform trials and optimization work under the best conditions. A reliable way to predict the subsequent improvement of your mill's performance! Stock preparation testing, such as: Strength analysis (tensile, tear index, porosity, burst index), optical analysis (dirt specks, brightness, color location, ERIC value), physical fiber analysis (fiber length, freeness, Somerville, stickies, Bauer McNett), chemical fiber and effluent analysis (ash content, COD, BOD), and sheet forming – can be completed in the laboratory.

TISSUE MACHINE LABORATORY

The tissue machine laboratory enables research and development regarding basis weight, caliper, tensile, formation, and softness (panel method). The laboratory is equipped with precision scales, basis weight die, oven, caliper tester, tensile tester, light box, and PPF (Pinch Pull Force) tester. In addition, tests can be conducted in the laboratories of the Technical University of Graz.

HYDRAULIC LABORATORY

With our hydraulic laboratory ASTROE, we have an internationally recognized institute for hydraulic development and investigation work at our disposal. Optimization on a computer using CFD and numerous model tests forms the basis of the high efficiencies achieved by the ANDRITZ pumps for the *PrimeLine*TIAC as well as for all kinds of pulp and paper applications.

CONTACT US

To learn more about the laboratories and R&D possibilities, please contact us:

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RAW MATERIALS AND CONSUMABLES

Softwood, hardwood, virgin fibers, recycled fibers, bagasse, bamboo, straw, liquid pulp (on request), chemicals, wires, and fabrics can be tested.

STORAGE AND HANDLING

We have the possibility to store pulp inside and outside the tissue center, sufficient for up to two weeks' operation.

FINISHED GOODS, UNUSED MATERIALS

The finished goods as well as unused material will be returned after the trial. Any materials not returned are to be disposed of safely using contract services.



Welcome on site!

Explore the possibilities of tissue production and R&D activities at our tissue pilot plant at our headquarters in Graz, Austria

The Tissue Innovation and Application Center has a supremely well qualified operations team headed by Boris Jancic, who brings with him vast experience of commercial tissue production. Boris and his team operate the tissue machine that has been built taking into account all the parameters and demands a modern, future-looking tissue producer could possibly think of. The machine allows various different configurations that can be set up to test numerous energy saving ideas, raw material, and new product trials.

Added to which there are in the region of 3,000 sensor points around the machine, which will record and save every conceivable piece of information or data that will later help to analyze the results of any R&D experiments carried out.

"I am looking forward to welcoming you to the *PrimeLineTIAC* in order to go beyond the present limits in the production of conventional, textured, and structured tissue."

BORIS JANCIC

Director Operation *PrimeLineTIAC*, ANDRITZ

STOCK PREPARATION

Performing trials with various types of pulp



Stock preparation: excellent fibers right from the start

THE STOCK PREPARATION SYSTEM

An outstanding tissue product begins with outstanding raw material preparation! Benefit from the brand new tissue pilot plant that is equipped with its own stock preparation and approach flow system – from pulping to the tissue machine headbox. Various types of pulps can be treated in a continuous production line without any intermediate long-term storage that might negatively influence the fiber properties.

As a further plus, the system is split into separate short- and long-fiber lines to allow best development of fibers. As a result, we can treat fibers according to the individual needs of every customer or project, and trials are not on down-scaled laboratory equipment,

but on industrial-scale machines. The advantage is that we have the most accurate technological results from the trial and any ongoing research and development work.

PULPING

The outstanding design of the FibreSolve FSV pulper rotor and extraction chamber allows high slushing consistencies of up to 7.5%. The main benefits are gentle fiber treatment and low power consumption. With its special mixing vanes, the FibreSolve FSV creates extraordinarily good circulation and enhances pulp submergence. The cleaning vanes keep the screen plate clear. Thanks to the high-consistency pulping, fibers are fully disintegrated without being damaged.



FibreSolve FSV pulper

REFINING

From a technological point of view, the short fiber especially is gaining increasing importance for the production of tissue. As a consequence, we now apply the most advanced refining concept for this application – the Papillon refiner, which is the centerpiece of the stock preparation line. Compared to conventional refining, fibers are treated much more gently in the cylindrical refining zone. Superior fiber properties are achieved, such as high tensile and tear at a much lower freeness drop. The amount of fines created during the refining process is significantly lower, resulting in less dust at the tissue machine.

BLENDING SYSTEM

The individual stock components are then mixed in two separate ShortFlow blending systems, each comprising a mixing pipe and a mixing chest. Thanks to the special design of the mixing pipe and the control philosophy, only a blend tank is required per line, but not a separate machine tank.

APPROACH FLOW SYSTEM

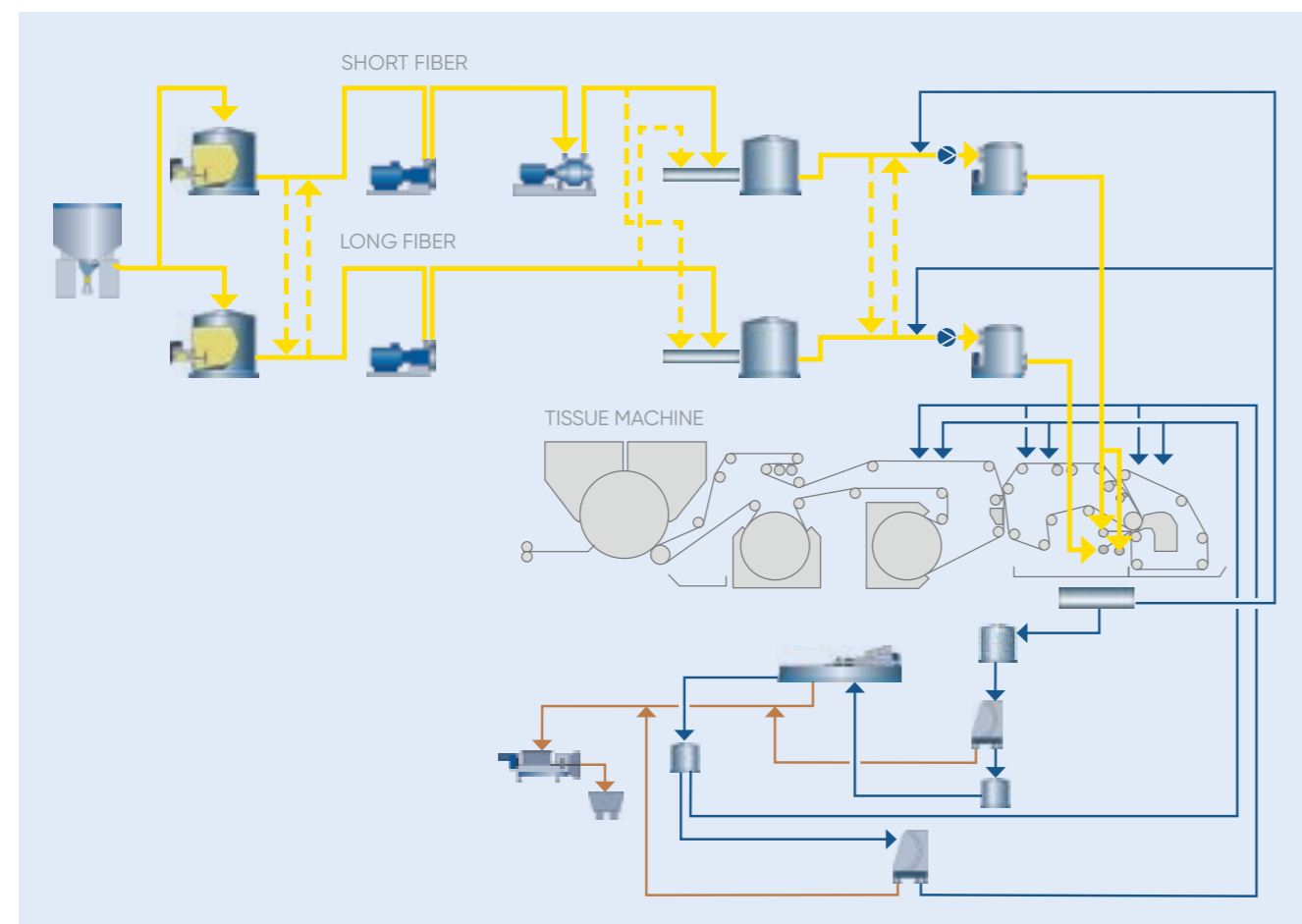
Two headbox screens, type ModuScreen HB-E, protect the tissue machine. These screens operate on an inflow principle and combine lowest energy requirements with minimum pulsations.

FIBER RECOVERY – WATER SYSTEM

Excess water from the tissue machine is clarified in a micro-flotation unit and will be used as shower water. MicroScreens are installed to ensure maximum cleaning of the shower water. These units are fitted with a fine-slotted screen plate and automatic self-cleaning device.

SLUDGE TREATMENT

The sludge from the system is handled by a reject compactor ReCo-L, which is able to dewater from low consistencies up to a dryness suitable for disposal.



Flowsheet of the stock preparation system of the tissue machine.



Flowsheet of the stock preparation system of the tissue machine.

DEFLAKING

Deflaking can be applied as an option. Depending on the type of pulp or its degree of disintegration, different toothed filling rings are applied.

FLEXIBLE SYSTEM CONFIGURATION

Interconnecting piping between the lines enable the use of the refiner and deflaker for short as well as for long fiber. It is then possible to evaluate the impact of different fiber treatment on the final product.

THE STOCK PREPARATION PLANT IN BRIEF

- FibreSolve FSV pulper
- Two dump chests with TMX agitators
- Two deflakers DFL
- Papillon refiner CS
- Two ShortFlow chests with TMX agitators
- Two fan pumps
- Two ModuScreens HB-E
- White water cyclone
- White water flume/silo
- White water system w. DAF
- Two MicroScreens
- Reject compactor ReCo-L



HIGHLIGHT

Complete line testing with a flexible configuration of both long and short fiber with highly efficient and proven technology.

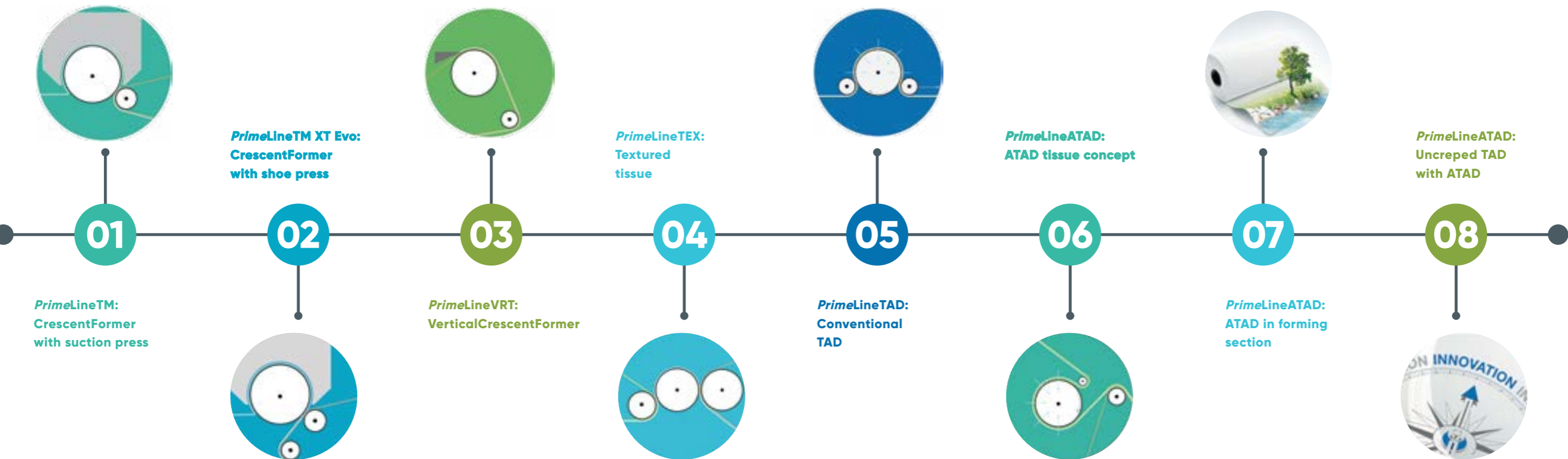
THE TISSUE MACHINE

Utmost
flexibility



The tissue machine: utmost flexibility

The tissue machine offers utmost flexibility. It features various configurations that are available as single-machine concepts on the market! You can run trials on what could potentially be your future machine.



"It is a real masterpiece: one machine of such flexibility. This is truly unique!"

Xu Lian Jie
CEO, Hengan Group, China

"This is what the market has been waiting for. After a long period of only minor inventions, this pilot plant is a real boost to the tissue industry."

Guido Bröcker
Senior Vice President Technology, Metsä Tissue, Finland

DRY-CREPED TISSUE

Dry-creped tissue, so-called conventional tissue, is produced on CrescentFormers with either a suction pressure roll or a shoe press configuration.

At the *PrimeLineTIAC* you can test the *PrimePress XT Evo*, the latest shoe press technology available on the market.

TEXTURED TISSUE

Bringing together both: energy efficiency and higher sheet quality – textured tissue.

STRUCTURED TISSUE

Wet molding creates a 3D arrangement of the fibers that is preserved by means of air-drying without any additional pressing, thus resulting in higher bulk.

"I didn't think it was possible to produce a tissue machine that was this flexible, but ANDRITZ made it happen. In addition, it is the only TAD pilot machine with the same design as the commercial machines."

Confidential customer
Director of Product Development, US tissue producer

The pilot plant features different TAD configurations for trials that essentially vary with regard to energy consumption.

YOU FORM THE BASIS: CONJOINT DEVELOPMENT

A tissue machine of this kind is only possible when you possess extensive know-how: not only about engineering and manufacturing but about the tissue production process as well. And this is only possible if you have extensive know-how exchange, share ideas, think of inventions, and listen to each other. We thank all of our customers for the extensive know-how and experience exchange over the past 30 years. It is you and your thoughts that form the basis of this pilot plant!

"The pilot plant installed at the ANDRITZ headquarters is perfect! We can conduct trials, and we also have access to all the know-how, from engineering to manufacturing to research."

Mauro Tempini
Technical Director, Industrie Cartarie Tronchetti, Italy

Technical data and highlights

TISSUE MACHINE

Paper grades	Tissue from 10 to 50 g/m²
Former concept	CrescentFormer, TwinWire former
Yankee speed	600 to 2,500 m/min
Reel speed	500 to 2,000 m/min
Sheet width	600 mm
Reel	Centerwind reel
Pilot configurations	= Commercial configurations



MACHINE CONFIGURATION

- Headbox:
1-, 2-, 3-layer configuration
- Former:
CrescentFormer, TwinWire former
- Pre-Dryer:
Two TAD drums, 14 ft.
- Hood:
TAD hood
- Press:
Suction press, shoe press
- Dryer:
Steel Yankee, 16 ft.
- Hood:
High-temperature, 500°C
- Sheet run:
Passive /active foils
- Reel:
Centerwind reel



The tissue machine features several technical highlights
Impressions: the two TAD drums, tissue production, close-up steel Yankee and press, active foils.

NIP PRESSURE PROFILES

The conventional press roll gives medium nip pressure and notable rewetting due to its symmetrical pressure curve. When the focus is on obtaining maximum bulk, the maximum nip pressure of a shoe press is kept low. When the emphasis is on obtaining maximum dryness, the maximum nip pressure of the shoe press is pushed to the top. Typical of both shoe press operational modes (maximum bulk or maximum dryness) is the abrupt pressure relief at the end of the nip, minimizing rewetting effects. Thus, shoe presses offer two main benefits:

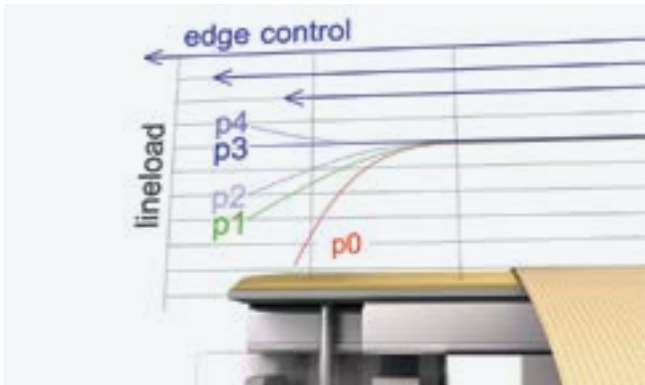
HIGHER AFTER-PRESS DRYNESS

This can be achieved by operating the shoe press in "dryness" mode, obtaining high after-press dryness due to the right nip pressure curve and only minor rewetting. A papermaker can choose to either lower the thermal energy consumption or increase the machine speed, raising production for a given level of thermal energy consumption.

BULKIER SHEET

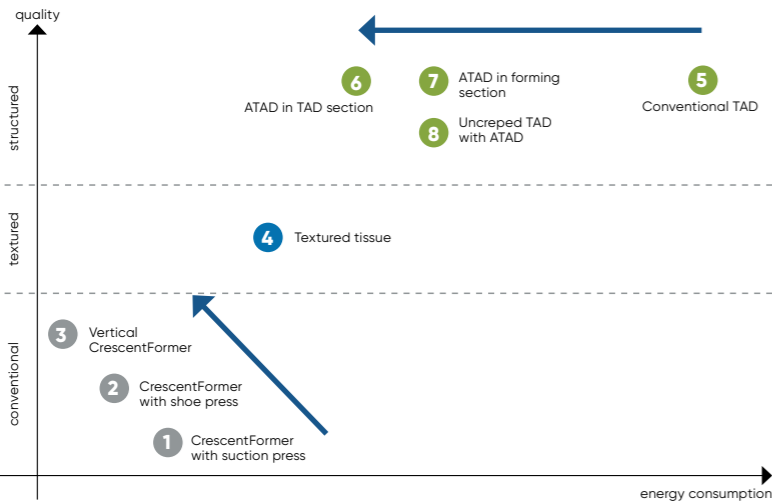
A shoe press operated in "bulk" mode produces a bulkier sheet. Low maximum impulse pressures still provi-

de good after-press sheet dryness. This can be used to produce a bulky sheet compared to one produced with standard suction press rolls, but requiring less virgin fiber, or allowing substitution of less costly furnish for high-quality furnish.



EDGE CONTROL SYSTEM

The new edge control system gives the papermaker full control of the critical edge zones. In the edge area, the local line load can be controlled so that it is possible to set the optimum press nip!



The machine configurations in a quality-energy comparison

SHOE PRESS, PrimePress XT EVO

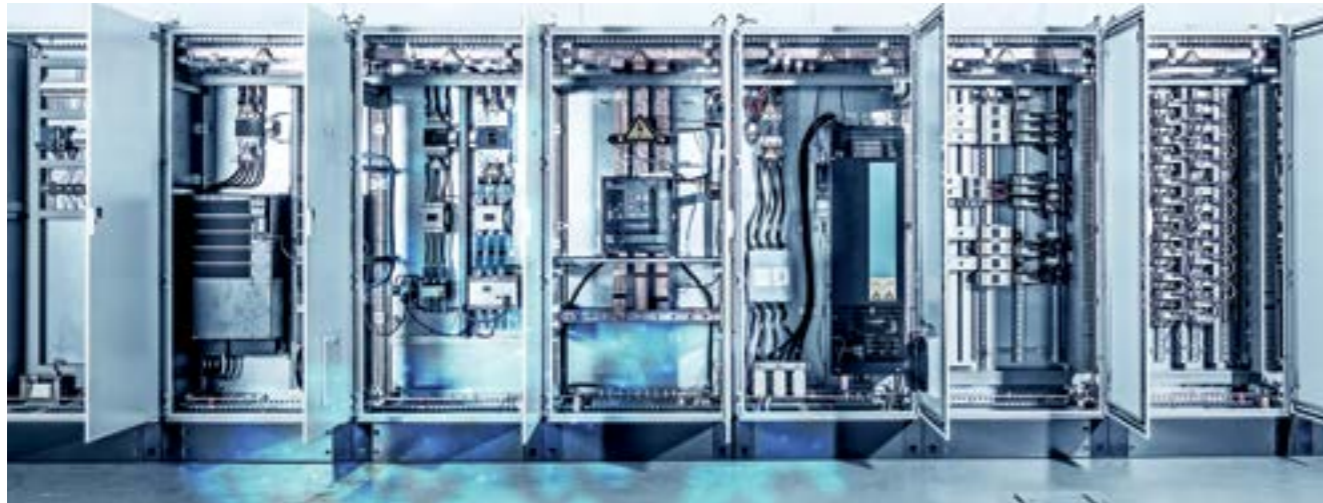
The new PrimePress XT Evo shoe press dewateres the web gently, but still achieves a far higher post-press dryness than conventional presses. Due to the new energy-efficient press design, improved dewatering, and reduced need for thermal drying, it achieves either significant savings in energy or a noticeable increase in capacity.





AUTOMATION

Foresee digitally
with Metris



Automation solutions: Process-specific or complete turnkey installations

Control, automation, and optimization are handled with a multi-disciplinary and holistic approach. All solutions are fully integrated to enhance operations, maintenance, information delivery, and quality assurance.

Modern mills require a very high degree of automation to monitor and control the flows, valve technology, machinery, drives, on-machine quality, speeds, throughput, and other important aspects of paper and board production. Systems with the flexibility to monitor and control everything from stock preparation to paper finishing are very important.

With over 110 different ANDRITZ Automation locations all around the world, the portfolio comprises both project concepts and execution throughout operations, starting with pre-feasibility studies and front-end engineering of controls, electrical and power systems engineering followed by estimating, scope development, and value engineering. This also includes project management, erection work, start-up and operator training and continues with maintenance and engineering work for expansion and improvement projects.

TURNKEY CAPABILITIES

The turnkey approach is interdisciplinary, closely linked with process design and using well-maintained templates and consistent design data for plant engineering and framework supply. With plant control systems, simulation and advanced control tools, automation ex-

perts help paper plants to become operationally ready within a short start-up period through comprehensive process know-how and pre-tested components. The close cooperation between automation experts and other business areas consolidates the concentrated process knowledge that creates significant advantages and customer-focused solutions.

INCREASE IN OVERALL PROFITABILITY

The drive for innovation continually improves both processes and plants in order to raise the efficiency, sustainability and profitability of the plant and its processes while reducing costs and downtime.



Foresee digitally with Metris

Industrial IoT, Industry 4.0, digitalization – current buzzwords that industries use when seeking to improve their performance and equip themselves for the future of industry.

ANDRITZ DIGITAL SOLUTIONS

As a technology leader with extensive and long-term experience in supplying industrial measurement, control, and optimization solutions for various industries, ANDRITZ is combining process and equipment expertise with the latest enhancements in the digital era. The result of this powerful combination is Metris: a portfolio of ANDRITZ Digital Solutions.

METRIS OPP

One of the flagship solutions of Metris is to optimize industrial processes with Metris OPP – Optimization of Process Performance. Metris OPP has been developed over the past decade and is installed today in over 50 mills – mainly pulp mills – around the world. It combines powerful analytical and data mining software with the knowledge of the world's top process experts to deliver a smart service initiative for customers.

A CONSTANTLY GROWING PORTFOLIO

The depth and effectiveness of the Metris portfolio continues to improve thanks to ongoing R&D, collaboration with key customers and institutions, and venture activities. Portfolio options all rely on the three strategic focus areas of the Metris brand: Industrial IoT technologies, Smart Service concepts, and Venture activities. The main technological advancements integrated into individual Metris products are derived from big data analytics, smart sensor technologies, and augmented reality solutions. The Metris UX Platform providing full support throughout the entire lifecycle of a

plant is the most recent of our IoT developments. With Metris, customers foresee digitally due to the continuously improved portfolio and its performance – and to ANDRITZ providing tailored and fully integrated digital solutions from a single source.

INDUSTRIAL IOT

Benefits

- IIoT solutions across business segments
- Combined know-how from ten years' experience with Metris OPP
- Using the latest smart sensor technologies
- Big data analysis with tried-and-tested models for deviation analysis
- Providing information locally with augmented reality
- Extensive solution and process engineering knowledge
- Cybersecurity solution to safeguard data on the network





CUSTOM-TAILORED PUMP SOLUTIONS
for the tissue
pilot plant

Custom-tailored pumps for the tissue pilot plant

POWERFUL PROCESS PUMPS

These centrifugal pumps are used for all tissue production applications at the Tissue Innovation and Application Center. They offer robustness, wear resistance as well as a service-friendly and modular design. Thus, they fulfill highest expectations in terms of efficiency, lifecycle, maintenance friendliness, and economic efficiency. Besides the transport of all types of liquids and water in the tissue machine, the process pumps also operate in the stock preparation section. They are most suitable for this task thanks to their operational range, which allows pumping of suspensions at consistencies of up to 8% b.d. and offers high efficiencies of up to 90%. Furthermore, the process pumps are used

for drainage purposes. For this task, two pumps with additional degasser and an internal vacuum pump are installed in order to convey waste water from the pit and the plant from being flooded.

HEADBOX PUMP WITH LOWEST PULSATION

This fan pump operates with lowest pulsation and conveys pure and slightly contaminated media as well as stock suspensions with consistencies of up to 2%. The low pulsation is achieved by the offset rotor blades developed especially for tissue production. With efficiencies beyond 90%, it helps to save valuable energy, and the innovative axial split case design ensures easy and fast maintenance.



UNIQUE SENSOR CONCEPT

The pumps are equipped with sensors to obtain detailed measurements and provide precise pump control and regulating. This pump sensor concept in the *PrimeLineTIAC* is unique at pilot plants worldwide. It offers the facility not only to control the operating mode of the pumps, but also to obtain important information on the process and on operation under different conditions.

ALL P&P PUMPS AT A GLANCE

- Process pumps
- Fan pumps
- Medium-consistency pumps
- Self-priming centrifugal pumps
- Air degassing pumps
- Sump pumps
- High-pressure pumps



Our pulp suppliers deliver high-quality pulp

SUZANO

The renewable-based Brazilian company, Suzano stands out in the global production of eucalyptus pulp and as a manufacturer of paper in Latin America. With 37,000 employees and outsourced workers, the company has operations based in the states of São Paulo, Minas Gerais, Rio de Janeiro, Espírito Santo, Maranhão, Pará, Tocantins, Ceará, Bahia and Mato Grosso do Sul, as well as a joint venture with Stora Enzo, through which it operates Veracel. Altogether, in its 11 units, the company has a total annual pulp production capacity of 11 million tons and 1.4 million tons of paper. In a partnership with Cenibra, it operates Portocel (ES), the only Brazilian port specialized in pulp shipments. Suzano's competitiveness can be measured by its global footprint, with sales to over 80 countries and annual exports of R\$ 26 billion, as well as by the scale of its operations.

Always practicing sustainability, we invest in innovations that are born of the protagonism of our employees and from the use of renewable raw material and biotechnology. We have eight technology centers, including three outside of Brazil: one in Burbury, Canada, focused on developing lignin solutions and FuturaGene, with labs in Israel and China, both dedicated to developing new biotech solutions.

At Suzano, we use sustainable practices in everything we do, from fluff to lignin, from cellulose to tissue, from A4 cut size paper to carton paper – products developed by our teams and with our clients.

A responsible and prosperous cycle that is based on our eucalyptus plantation, in which we are experts. This means that we always use the best management practices in the world – thus contributing to maintaining fertility and protecting our land against erosion and degradation. We invest in the cultivation and preservation of over 2 million hectares of land, of which 900,000 are natural forests, dedicated to environmental conservation, contributing to mitigate climate change and to foster a low-carbon economy.

SÖDRA

Södra was founded in 1938 and is best known to the paper industry as one of Europe's largest suppliers of pulp for the global market. Its operations are among the most modern and efficient in the world, following a significant investment program at all three of its pulp mills to increase both capacity and quality. The main recipient of the 600-million euro investment was Södra Cell Värö which has been virtually rebuilt. The new state-of-the-art line is focused on delivering consistently high-quality, premium pulps.

The pulp division at Södra, Södra Cell, is part of an international forest industry Group with 3,500 employees, which includes one of the largest sawmill operations in Sweden. In addition to pulp, Södra produces sawn timber and interior wood products mainly for the building trade, and exports account for some 70 percent of sales. The Södra Group is also the largest forest-owner association in Sweden, with a membership of more than 50,000 forest owners – the forest estates of these members supply the raw material for the mills. Södra provides high-quality services for its members, from planting and forest management advice to final harvesting, and around 70% of members' wood is now certified either to FSC, PEFC or both. In return, Södra is secure in the knowledge that its mills use wood from high-quality, well-managed forests which are there for the long term.

Innovation with a focus on sustainability is key for Södra, and its research has led to the development of biofuels and alternatives to fossil-fuel-derived products. Södra uses every part of the tree, and is continuously developing new products from this fantastic raw material. Through value-generating relationships and a long-term approach, Södra is leading the way for the next generation of forestry and pulp production.

A dream with
the colors of Brazil
and the size of the world.

A new global company is born. The new Suzano is a blend of ideas, talents and possibilities for a future that promises to make us even prouder.

- 11 mills
- 37 thousand direct and indirect employees
- 900 thousand hectares of preservation area
- 8 international offices
- 8 research centers
- 20 distribution centers in Brazil



www.suzano.com.br



Eight meters to impact

See the landing at sodra.com/pulp



pulp+



A BIRTHPLACE FOR NEW IDEAS

PrimeLineTIAC Tissue Innovation and Application Center at the ANDRITZ headquarter in Graz, Austria, comprises a complete, state-of-the-art tissue production line, including laboratory facilities, to test and develop the tissue solutions of tomorrow.

In cooperation with our key technical partners we developed a tissue pilot machine that offers utmost flexibility for the production of conventional, textured, and structured (TAD) tissue.

The ANDRITZ *PrimeLineTIAC* – Tissue Innovation and Application Center is sponsored by FFG as part of R&D infrastructure promotion.

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