

Nordic Pilot Center

From Concept to Scale

Industrial piloting
Material Development
Engineering

www.nordicpilotcenter.com

About Nordic Pilot Center

1000+
piloting

55+
professionals

Industrial piloting
since

1916

Years of experience
in the pulp and paper
industry

200+



Nordic Pilot Center supports companies in the transition from fossil-based plastics to paper, board and biofibre solutions.

From the left: innovative leaders Marko Lauraeus and Nora Haatainen.

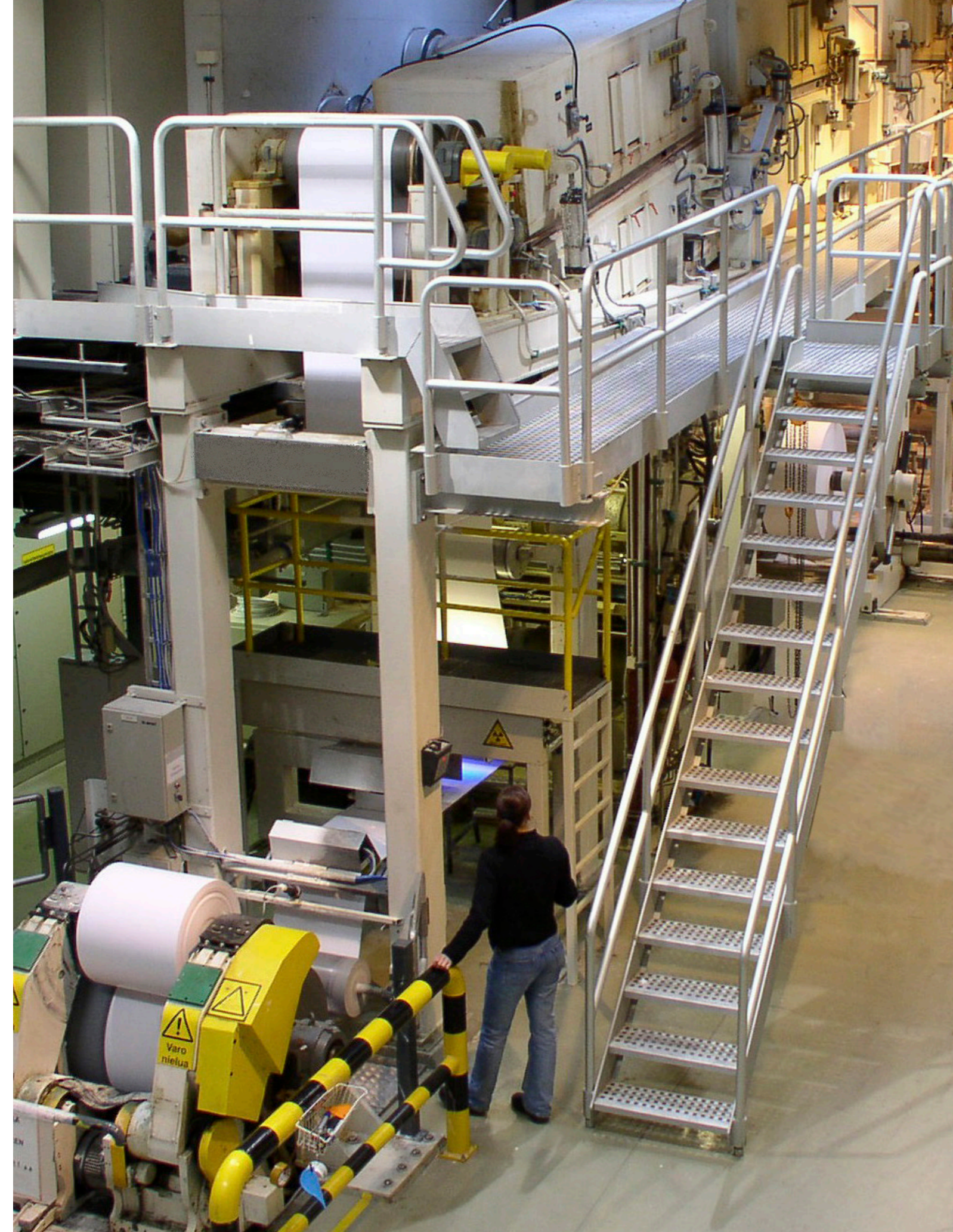
Nordic Pilot Center accelerates the development and piloting of bio-based materials for commercial markets.

The Nordic Pilot Center is the world's leading biofibre pilot centre, combining the expertise of Fiber-X Finland Oy and Oy Keskuslaboratorio Ab (KCL) into an innovative service concept. We offer comprehensive solutions in material development, industrial piloting, process and plant design, especially for the pulp, paper and biofibre industries. Our aim is to accelerate the development and commercialisation of bio-based products to meet growing market demand. The Nordic Pilot Center is committed to managing the entire value chain from research to piloting and design.

OUR EXPERIENCE

Our company is dedicated to offering clients a seamless and comprehensive service platform, designed to accelerate innovation from the initial stages of research and piloting to full-scale commercial deployment. With our extensive experience in fiber-based and sustainable solutions, we help industries scale quickly and efficiently, enabling smoother, more successful entry into global markets. Our team's expertise and commitment to sustainability ensure that businesses can confidently navigate the challenges of commercialization, driving impactful and lasting innovation across the world.

Our Services



INDUSTRIAL PILOTING & SCALE-UP

We provide fully equipped piloting facilities and expert support, where ideas can be tested and scaled up, from prototype to market-ready solutions. We are specialized in the biobased fibers, pulp, paper and board industries. We offer pilot facilities for fiber processing, material and finishing testing, and production trials, ensuring that our clients can develop, refine, and perfect their solutions before full-scale manufacturing.

PROCESS ENGINEERING & SOLUTIONS

Optimize your production processes and implement cutting-edge engineering solutions tailored to your needs. From process simulation to full-scale engineering design, we provide end-to-end support to enhance efficiency, reduce costs, and overcome technical challenges.

Our Services



MATERIAL TESTING & ANALYSIS

Ensure product quality and compliance with rigorous analytical testing services. We offer a full range of testing for paper and board, composites, and chemicals, providing reliable data and insights to drive product development and certification.



SUSTAINABILITY SOLUTIONS

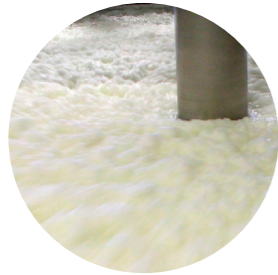
Advance your sustainability goals with our expert guidance in circular economy practices and alternative material and process development. We provide professional research and development services to help you reduce environmental impact and build a greener future.



KNOWLEDGE TRANSFER & PAPER ACADEMY

Empower your team with practical, hands-on training from industry experts. PaperAcademy offers customized courses and certification programs that enhance skills and knowledge, ensuring your team stays ahead in the fast-paced world of fiber and bioproducts technology.

Process based services



FIBER PROCESSING

We provide advanced solutions for efficient pulp preparation and fiber refining, ensuring optimal fiber quality and performance at every stage. Our services cover key processes, including cleaning, deflaking, and screening, which are designed to maximize fiber potential while supporting sustainable and consistent production. Our expertise enhances process reliability, helping clients achieve superior pulp quality with reduced environmental impact.



PAPER PRODUCTION

Our pilot-scale paper production facilities offer versatile forming options, from traditional to innovative foam forming methods. With capabilities for full reel production, our advanced headbox, drying, and calendering technologies enable precise testing and development tailored to the evolving needs of the pulp and paper industry. This comprehensive approach ensures that clients can evaluate product performance and refine formulations in a controlled, scalable environment.



COATING & SURFACE TREATMENT

We deliver sophisticated, multi-layer coating solutions that enhance surface properties to meet diverse industry specifications. Our services include options for curtain coating, film coating, size press, spray, and roll applications, all tailored to maximize functionality and aesthetic quality. These treatments are designed to meet the dynamic demands of paper and packaging products, offering clients adaptable, high-performance solutions.



FINISHING & CONVERTING

Our finishing and converting services offer precise, customizable solutions to meet various packaging and production requirements. We specialize in precision rewinding, slitting, sheeting, and cutting, ensuring each product is tailored to client specifications. These services support efficient downstream processes and enhance product readiness for diverse applications, from industrial packaging to specialty papers.

- > PULPING
- > CLEANING & DE-INKING
- > REFINING
- > FLOTATION
- > DEFLAKING
- > THICKENING & WASHING
- > SCREENING & FRAKTIONATION
- > DISPERGING & HOMOGENIZATION
- > BLEACHING

- > PILOT PAPER MACHINE
- > INDUSTRIAL-SCALE REEL PRODUCTION
- > CALENDERING
- > HEADBOX TESTING
- > DRYING SECTION

- > SINGLE AND MULTI-LAYER CURTAIN COATING (DYNALAYER)
- > FILM COATING (SPEEDSIZER)
- > BLADE OR ROD COATING WITH FREE JET APPLICATOR (JETFLOW F)
- > SIZE PRESS
- > SPRAY COATING
- > SPRAY & ROLL COATING
- > FILM COATING (SPEEDSIZER)

- > REWINDING & SLITTING
- > GUILLOTINE CUTTING
- > SHEETER OPERATIONS
- > CONVERTING & PACKAGING

People

We are here to help you



Risto Herzberg

Head of Biomaterial Processing

A chemical engineer with a versatile skill set in R&D. Known for his positive outlook and problem-solving abilities, he contributes a broad technical expertise to biomaterial processing.



Antti Laukkanen

Head of Research and Development

An experienced R&D researcher, and inventor with a foundation in polymer science, specializing in nanotechnology, polymer chemistry, and water-based systems. Combines a strong academic background with recent industrial focus, applying advanced biomaterials expertise to biomedical and pharmaceutical innovations.



Antti Poikolainen

Head of Process Design

Brings over 30 years of process design expertise, piloting and mechanical design. He excels in problem-solving and development for paper machine innovations and has a deep technical knowledge in machine construction and maintenance.



Pasi Ahonen

Advisor, Process & R&D in Paper

An experienced technical professional specializing in pulp and paper industries. With a track record of managing large-scale operations and innovation for pilot plant development and industry advancements.



Mikko Mensonen

Head of Coating, Printing, Packaging

An experienced professional in coating, printing, and packaging solutions, with a focus on profitable product and business development. Specializes in commercializing innovations and managing large-scale international projects, aligning technology with market demands to drive growth.



Petri Sikiö

Head of Competence Center

A seasoned EAI specialist with extensive experience in EPCM/EPC project management and delivery across multiple continents. Known for successfully launching industrial facilities and leveraging decades of international expertise to drive innovative solutions.

People

Creative leaders



Nora Haatainen
CEO, Fiber-X

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A business and brand strategist with a strong foundation in innovation, marketing, and P&L management. With multi-industry experience and a science background, Nora has successfully founded and led an innovation unit and offers strategic guidance to startups, particularly in their growth phases.

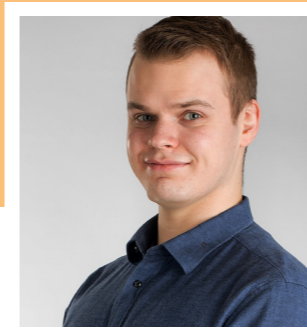


Marko Lauraeus
CEO, KCL

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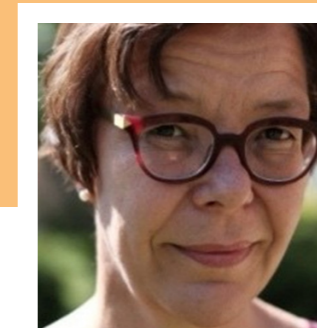
Serial entrepreneur with a academic science and technical background. He has established and led several successful ventures, combining his scientific expertise with strategic business development.

Our sales team



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