KANSAN
MATERIALS
www.kansanmaterials.com

OUR HISTORY

1992

KANSAN
Established as a small workshop of 200 sqm with 4 employees and developed various dry converting machines for the local market.

1996

Registered as an incorporated company in 1996, the debut of export operations with Romania. The first wet wipe converting machine was built in 1998. Kansan gained strength in the local market.

2002

Kansan moved to a larger facility with a 3000 sqm covered area, the number of employees was 35. Kansan captured 90% of the domestic market and Kansan's machines started to be seen in more than 40 countries. Subsidiary Dynamic Plus (DP) was established as a flow pack machines manufacturer and delivered 25 flow pack machines in the following two years.

2009

Kansan delivered more than 600 projects by far. Turnover raised average by 35+% every year in this period. The number of employees reached 55.

2013

Kansan moved to a new plant of 10.000 sqm area, 8.000 sqm covered. The number of employees rose to 115. Revenue-wise, Kansan got three times bigger compared to 2009 and Kansan's presence continued in 40 countries, spread into 5 continents worldwide.

2015

The first steps were taken for Kansan Materials and targets set for new generation nonwoven machinery and material production.

2019

Andropack was founded to offer flexible and efficient high-end robotic case packing and palletizing machines.

2020

Kansan Group finished the construction of the factory for Kansan Materials. The R&D Team finished the design of the headbox and the machine manufacturing process started.

2022

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Manufacturing of headbox, waterjet, through-air dryer and in-line slitter winder was completed. Test runs for flushable, biodegradable and environmentally friendly wetlaid substrates started.


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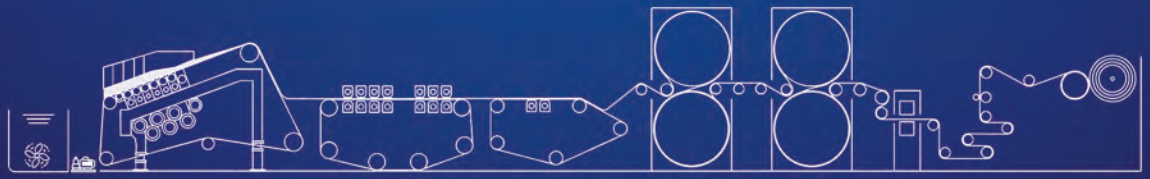
What is Wetlaid?

The wetlaid is a process where **short fibers** are suspended **in a water**, the fibers are deposited onto **a screen or porous surface** to remove the water, and the web is then consolidated **mechanically, chemically, or thermally.**

The application of wetlaid ranges are **fully flushable wipes**, **one-time-use disposable personal care products, wallpapers, glass and carbon fiber mats, teabags and filter media**. These materials can be used in **medical and hygiene, automotive, aerospace, construction** and even in the household sector.

KM wetlaid line consists of a **headbox unit, a hydroentanglement unit, a dewatering system, through-air dryers and a slitter winder** all of which are designed, engineered and manufactured by Kansan.



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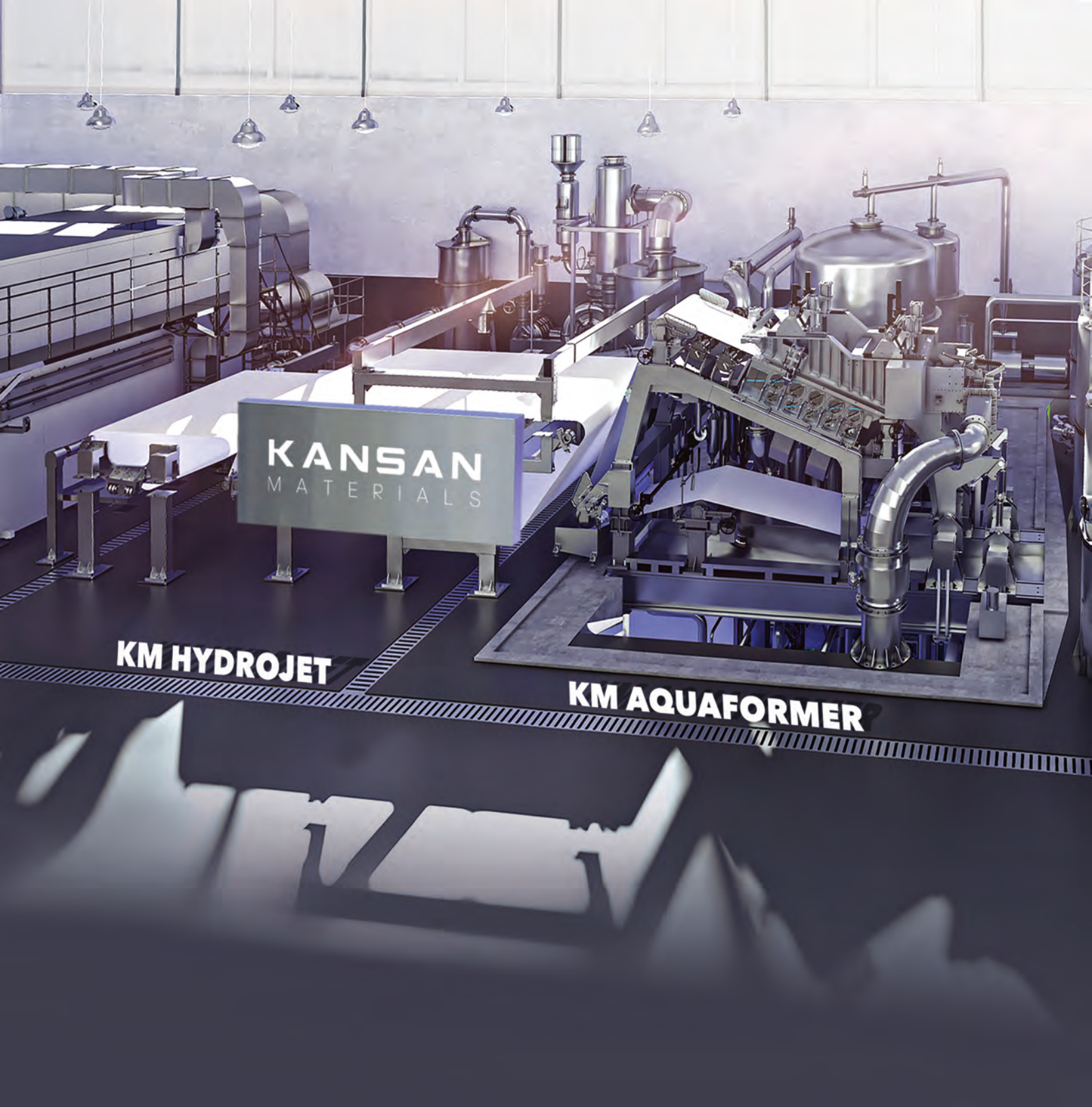
STATE-OF-THE-ART WETLAID LINE

ECO Friendly

SOPHISTICATED YET SIMPLE, COST-EFFECTIVE AND FLEXIBLE MANUFACTURING SOLUTION FOR FLUSHABLE AND BIODEGRADABLE NONWOVENS.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KM HYDROJET
KM AQUAFORMER

HEADBOX 

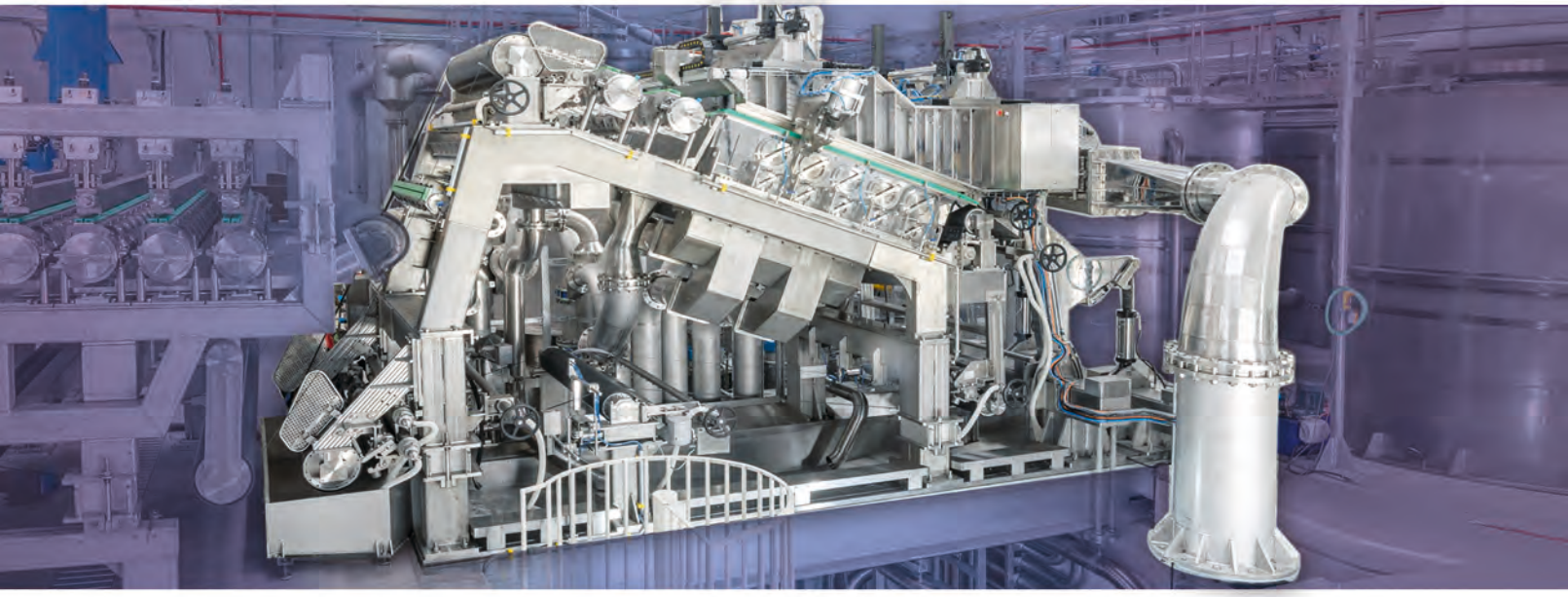
THE MOST EFFICIENT WET LAYING SOLUTION

KM-AquaFormer is the **most crucial** component of a **wetlaid production line**. **Wet laying** is a **mature and the most effective** method for paper and wetlaid nonwoven industries for quite some time.

This method allows the production of nonwoven materials from **renewable, cost-effective and eco-friendly** fibers like cellulose and pulp.

Main Benefits

- The easy and single production process of NW materials made of multiple fiber types
- Suitable for organic fibers such as wood pulp, or synthetic and inorganic fibers
- Kansan Materials High Yield Recycling®
- Kansan Materials Energy Efficiency®
- In-depth know-how and in-field application experience
- Compact design for low or medium capacity requirements (1,75 m up to 3,75 m)



KM AQUAFORMER

200m/min

PRODUCTION CAPACITY* All values are given at winder					
Basis weight (g/m²)		40	50	65	80
Speed (m/min)		200	200	170	110
Capacity (t/h)	**1750mm**	0,741	0,927	1,025	0,815
	3750mm	1,728	2,16	2,386	1,9
Reference Product		Single layer wipe 45-60 gsm			

Final Product : NW fabric for flushable wipes material, Wood pulp (75 – 85%) + made of man-made fibers of max 16 mm fiber length (15 -25 %), Glass fiber mats, Carbon fiber mats

Process Fibers : Wood pulp, short-cut cellulosic staple fibers such as viscose, lyocell, carbon fibers, glass fibers

HYDROENTANGLEMENT

FAST AND EFFECTIVE WEB BONDING TECHNOLOGY

High-pressure water jets spray water through the web on the mesh belts for fibers to entangle mechanically.

This method allows the bonding of **light and heavy webs** of even up to **3-4 layers** of natural or synthetic fibers.

Main Benefits

- Configurable jet heads per the application and customer needs
- High celullose recovery ratio
- Versatility
- User-friendliness
- Ease of maintenance
- Reasonable ROI
- Low amount of waste
- No chemical usage
- Membrane high pressure pump technology
- Simplified state-of-the-art filtration unit

KM HYDROJET

450m/min

*Line speed may change according to nonwoven type and application

Product Weight	80 gsm
Product Width	3,600mm
Fiber Length	10mm
Pressure	100 bar
Production	5,000kg/h

THROUGH-AIR DRUM DRYER

A HIGH CAPACITY, ENERGY-EFFICIENT THROUGH-AIR DRUM DRYER

The web after hydroentangling, even it is dewatered with superior suction, is still fairly damp and needs to be dried out for further processing.

KM-HydroJet is Kansan Materials **high-capacity Through-Air** are installed in wet forming lines thanks to their **high evaporation** capacity. It's suitable for evaporation from **30-80 gsm** nonwovens composed of 20% viscose 80% wood pulp.

Main Benefits

- Easy accessibility
- Even airflow
- Pre-drying with waste heat
- Web consistency
- Customizable
- Homogenous temperature
- Quick and even web drying
- High energy efficiency
- Heat recovery system
- Optional water recovery system

The unique heat exchanger technology of KM DRYER recovers a significant amount of heated air and energy to be used in climate control and heating the main water supply of the facility.

KM DRYER

450m/min

*Dryer number may increase according to speed of the line.

Product Weight	80 gsm
Product Width	3,600mm
Fiber Length	10mm
Pressure	100 bar
Production	5,000kg/h

SLITTER WINDER 

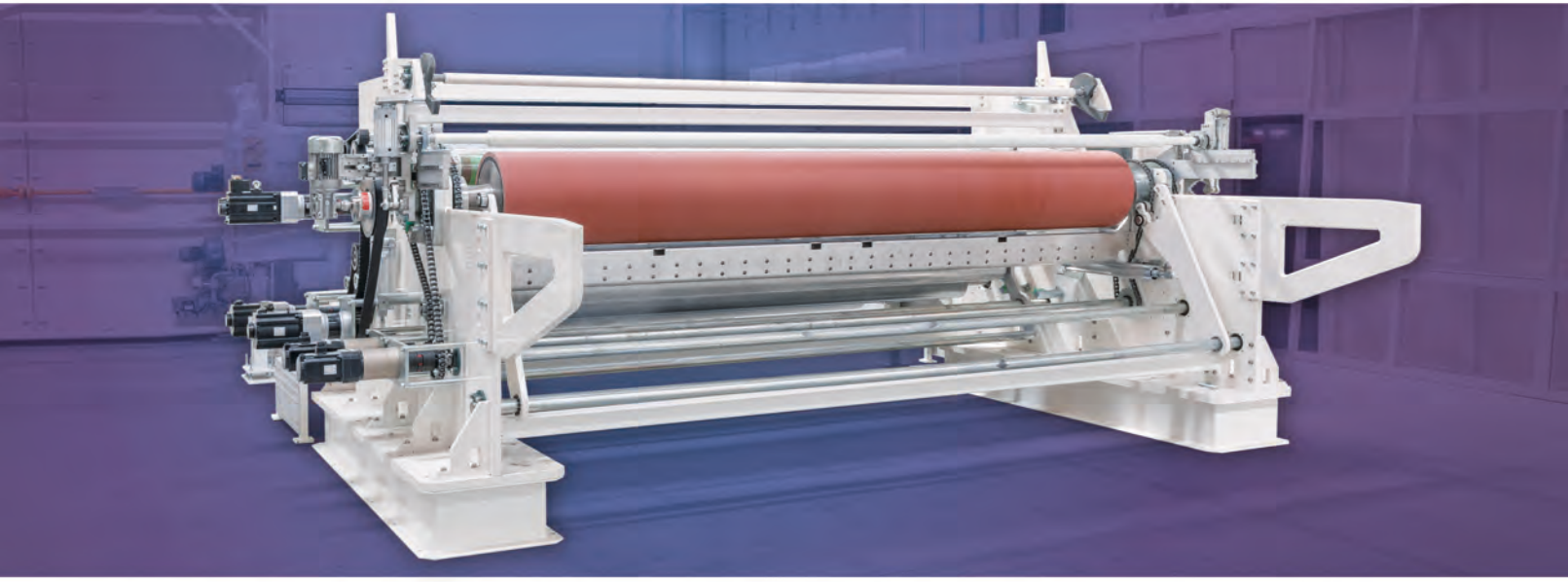
PERFECTION IN SLITTING WINDING PROCESS

The web that comes out of the line is winded over a cardboard or metal shaft. When the desired diameter is reached then the shaft is removed from the process and the new shaft is placed on the winder area. This change-over takes place **non-stop** at the line's **maximum running speed.**

KM-Slitter Winder is also equipped with longitudinal slitting blades that allow the slitting of full web width into narrower webs. The process is **fully servo-driven** and makes sure the finished rolls have the same tension and tightness throughout the winding process.

Main Benefits

- Changeable winding direction
- Automatic roll doffing and cross cutting
- Automatic shaft change
- Non-stop operation
- High grip drum coatings
- Shear tangential slitting system
- Finished reel & winding shaft handling
- Bowed spreader roll
- Trim suction system
- Rotary slitters



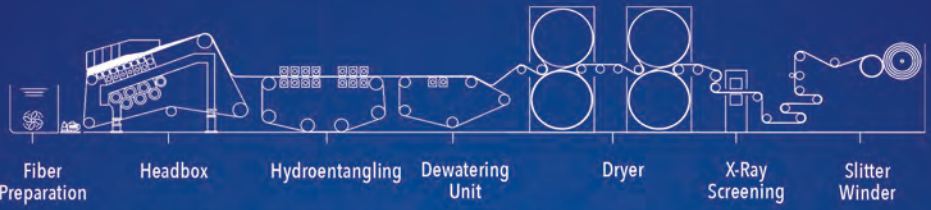
KM SLITTER WINDER

450 m/min

*Line speed may change according to nonwoven type and application

Product Weight	80 gsm
Product Width	3,600mm
Finished Reel	∅ 1,500 mm
Slitting Width	180 mm
Winding Shaf	∅ 3"

KM LINE CONCEPTS FOR NONWOVENS



The Wetlaid: Kansan Materials provides a complete range of machinery and equipment for wetlaid production technology.

Spunlace: A wide range of machines and equipment for spunlace application for perfect web formation.

CPC : Headbox, hydroentanglement unit, dryer and winder units for CP nonwoven production process.

SP Line: Unwinder, headbox, hydroentanglement unit, dryer and winder units for SP nonwoven production process.

SPC Line: Unwinder, headbox, hydroentanglement unit, dryer and winder units for SPC nonwoven production process.

Wetlaid Application Areas

Wipes Applications: The main products that are made of nonwoven materials in wipes applications are dry and wet wipes. Wet wipes soaked with cleaning or nourishing lotions can be used in many area for both consumer and industrial level.

Medical and Healthcare Applications: Being disposable and suitable for one-time use, nonwovens are used very widely in medical areas and applications. Surgical gowns, mask etc,.

Filtration: Nonwovens are used for water and air filtration application as well. The nonwoven materials have high heat resistance, ease of strikethrough. They can serve efficiently at long service life. They also have a positive impact on reducing energy costs.

Absorbent Hygiene: The main products that are made of nonwoven materials in absorbent hygiene applications are diapers, incontinence and fem care products.

Construction: The main drive factor behind the use of nonwovens in the construction sector is the low CO^2 footprint, fire-resistant properties, cost-effectiveness, contribution to energy saving, breathability. Nonwovens are actively used in insulation, roofing, membranes and ceiling covers with several other application.

Automotive: Nonwovens have become extensively usable in the field of automotive in recent years. Many automotive parts such as carpets filters or liners are being made by nonwovens.

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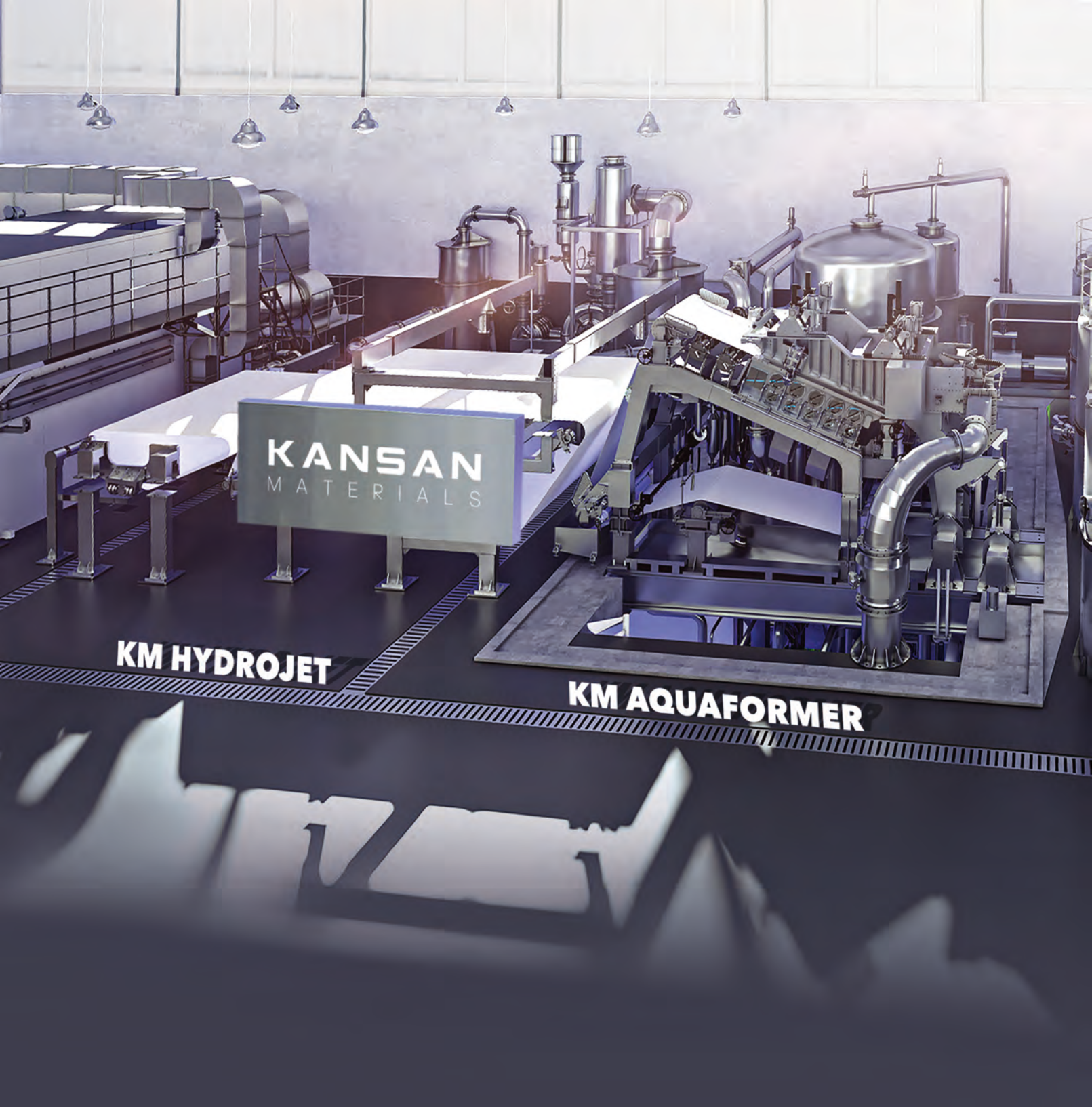
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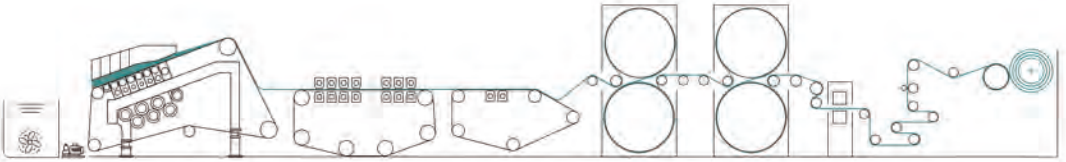

THE WETLAID TECHNOLOGY

Complete range of machines and equipment that represents the innovative solutions for wetlaid production technology.

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