



COATING SYSTEMS

**COMBINE VARIOUS TECHNIQUES
WITHIN ONE MACHINE**



MACHINERY MANUFACTURER

From development to lifecycle support -
custom machines, advanced software,
and dedicated service for your success.

ONLINE VERSION

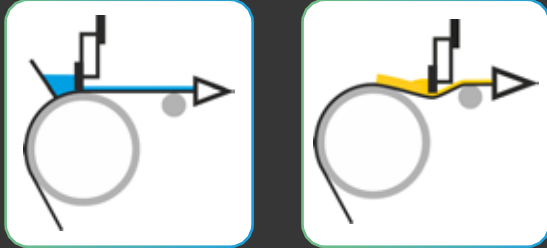


MAGNOROLL
combine various techniques
within one machine
**KNIFE • SCREEN •
MAGNET ROLL •
SLOT • SPECIAL DESIGNS**

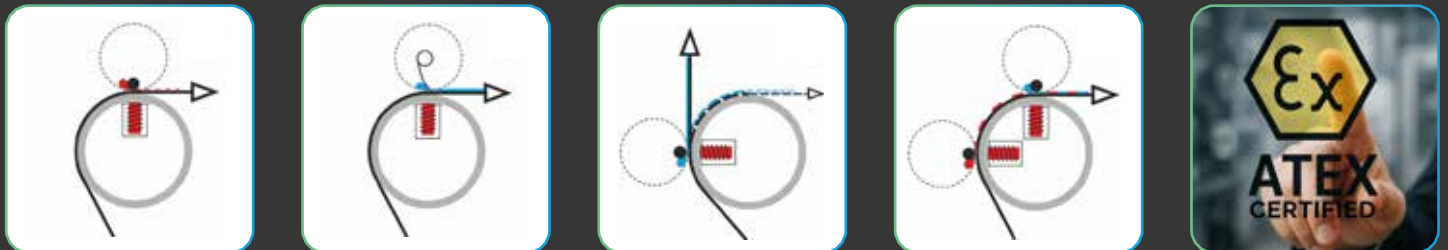
WWW.ZIMMER-AUSTRIA.COM

PERFECT COATING. EVERY TIME.

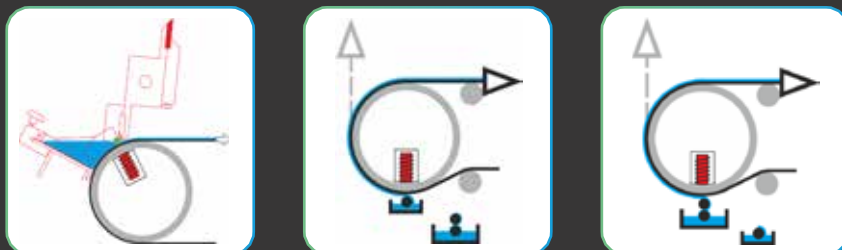
KNIFE COATING | PAGE 8 - 9



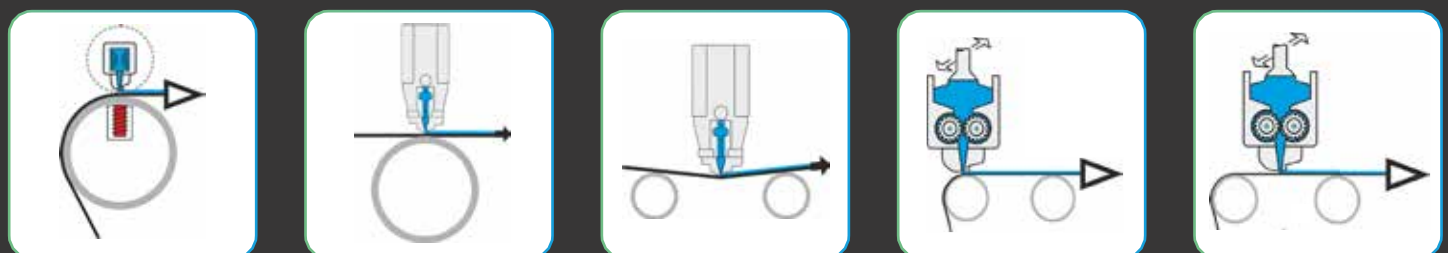
SCREEN COATING / PRINTING (ATEX - CERTIFIED) | PAGE 10 - 11



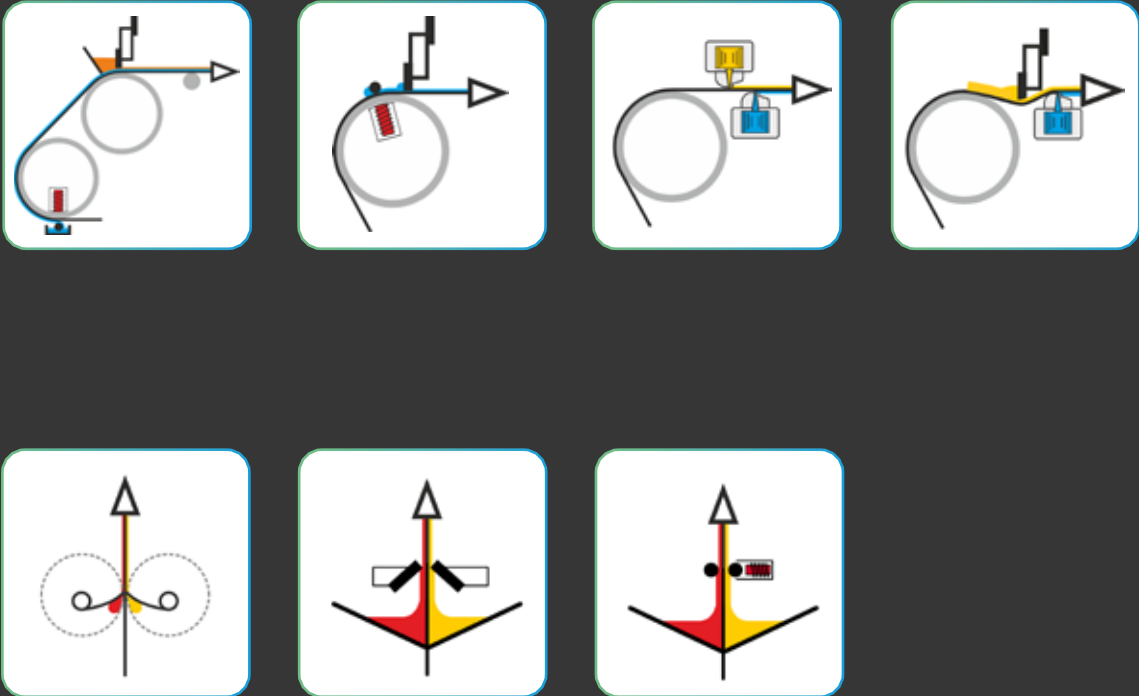
MAGNET ROLL COATING, FINISHING & LACQUERING | PAGE 12 - 13



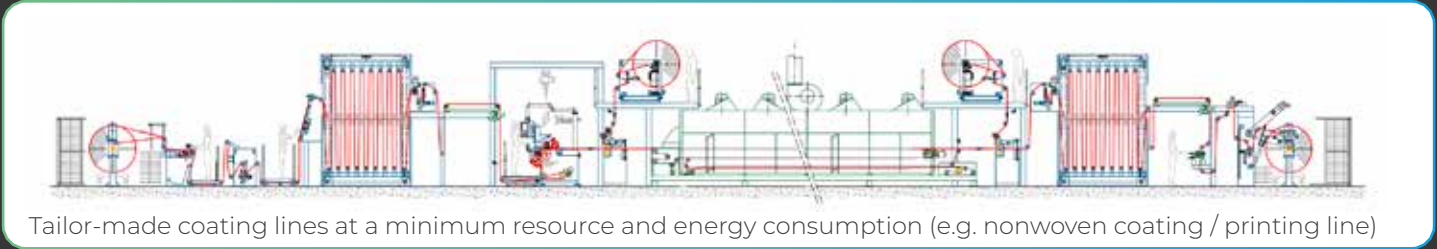
SLOT FOAM / PASTE COATING | PAGE 14 - 15



SPECIAL EXECUTION & UNIQUE COATING PRINCIPLES | PAGE 16

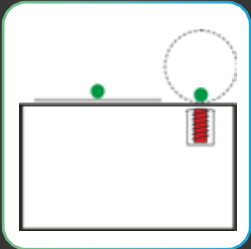


COATING, PRINTING & FINISHING LINES | PAGE 17 - 18



Tailor-made coating lines at a minimum resource and energy consumption (e.g. nonwoven coating / printing line)

LAB MACHINES | PAGE 19



WHERE OUR SOLUTIONS COME TO LIFE



HOMETECH



INDUTECH



OEKOTECH



PACKTECH



AGROTECH



BUILDTECH



EXPLORE THE DIVERSE APPLICATIONS FOR TECHNICAL TEXTILES



MEDTECH



MOBILTECH



PROTECH



SPORTTECH



CLOTHTECH



GEOTECH



DRIVEN BY PERFECTION

Driven by perfection and committed to the credo – **First in Quality & First in Service** – the machine manufacturer **ZIMMER AUSTRIA** has become the benchmark for dependable high-class machines in the textile printing and finishing industry. The fast-growing market requires reliable and innovative coating solutions. ZIMMER has the required know-how, the global business partner network and the profound technologies to cope with the market needs of **cost-effectiveness, quality, flexibility and sustainability**.

With more than **150 years of experience** ZIMMER is constantly endeavouring to enhance our customer's competitive advantage by providing the most efficient machines. Regarding the individual requirements and coating techniques, especially for technical textiles, ZIMMER has developed **unique and innovative multipurpose coating systems in modular design** to guarantee optimal results for each application.

Reliable solutions for coating with **liquids, pastes, lacquers** and **foams** on various substrates such as:

- **Technical Textiles**
- **Foils**
- **Carpets**
- **Nonwovens**
- **Paper**
- **Other innovative materials**



ONE MACHINE. ENDLESS POSSIBILITIES.

ZIMMER AUSTRIA offers high-quality multipurpose coating machines in an unique **modular design** execution, to combine **various coating techniques within just one machine**. From one-color printing to coating with paste or foams (instable, meta-stable, stable).

Different coating modules such as – **knife, screen, slot or magnet roll coating** – can be changed by a few simple steps. This minimizes machine downtimes and ensures quick adaptation to specific requirements.

WITH ZIMMER AUSTRIA YOU CAN MAKE THE DIFFERENCE 4 SUCCESS PILLARS FOR SUSTAINABLE ADDED VALUE



HIGHEST PRECISION, EVEN ON LARGE WORKING WIDTHS

Outstanding concentricity precision is essential for premium coating results, especially on large working widths. The world-renowned **ZIMMER MAGNET SYSTEM PLUS** with up to three magnet bars in one roller sleeve ensures perfectly uniform application. Even beyond 5 meters, **ZIMMER AUSTRIA** coating systems deliver exceptional precision, stable processes, and consistently superior coating quality.



ATEX-CERTIFIED FOR EXPLOSIVE ATMOSPHERES

ZIMMER AUSTRIA designs and manufactures **ATEX-certified equipment** for explosive and solvent-based processing environments. The explosion-proof **MAGNOROLL** fully complies with European ATEX directives, ensuring safe operation wherever flammable gases, vapors, or solvents are present. With premium components, advanced grounding, and secure enclosure design, our systems deliver maximum safety and reliable explosion protection.



FROM IDEA TO INNOVATION - OWN APPLICATION CENTER

Accelerating our clients' success is at the core of our DNA. That is why **ZIMMER AUSTRIA** offers trials and small-scale production runs at our **Technology Application Center** in Klagenfurt. Depending on individual requirements, a wide range of standard and specialized coating techniques can be tested together with our expert technologists.



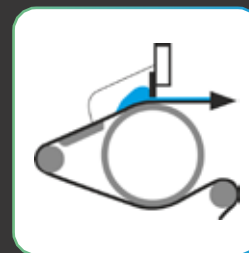
QUALITY ALWAYS - THROUGH DECADES OF EXPERIENCE

Outstanding coating results demand precision in every detail and the highest quality at every process step. With decades of experience in coating system manufacturing, **ZIMMER AUSTRIA** has achieved breakthrough innovations that benefit customers worldwide. Our tailor-made systems, built from premium materials and equipped with state-of-the-art software, deliver the highest level of quality and performance.

KNIFE COATING



MAGNOROLL coating machine with MAGNOKNIFE



MAGNOKNIFE
Over-Roll

MAGNOKNIFE Over-Roll or Over-Air coating, executed with reversible high precision knife holder, suitable for all types of coating squeegees as well as different special coating devices, such as round knives or smoothing squeegees. This reversible high-precision beam is equipped with two knives (available in different executions) and ensures perfectly even application and fast adaptation for different products. The precision beam is adjustable 360° and can be locked at any position by pneumatically operated brakes.

The **MAGNOKNIFE** can be positioned horizontally and vertically by two servo motor drives each. The knife can be regulated via the vertical adjustment with a device for weight monitoring on the moving product, in order to guarantee first-class coatings on a constant level.

Standard basic execution with manually operated side limiters and counter bars for accurate bordering and reliable sealing.



MAGNOROLL foam coating system with MAGNOKNIFE Over-Roll

OPTIONAL

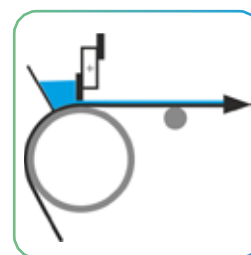
- with motorized limiters for fast and easy handling.
- with edge sensing on both sides, for automatic correction of any material deviation or material width change on the right and left independently of one another.

Working width: up to 5200 mm

FOAM / PASTE COATING



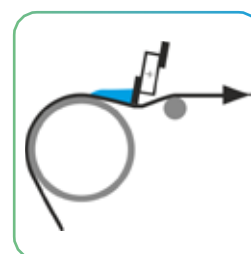
KNIFE coating with trough



With
MAGNOKNIFE
Over-Roll



MAGNOKNIFE Over-Air



With
MAGNOKNIFE
Over-Air

COATING ACCESSORIES

(available in various configurations)



Foam Mixer



Standard paste pump

SCREEN COATING & PRINTING



MAGNOROLL screen printing & coating

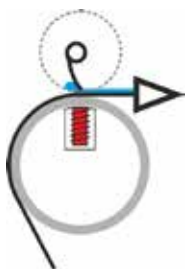


Intuitive
touchscreen
main control
panel with
state-of-the-
art operating
software

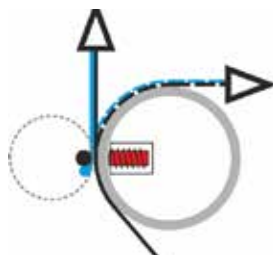
MAGNOROLL coating machines with Single or Double Screen Coating/Printing for paste or any kind of foams. 100% uniform application is ensured by the world famous **ZIMMER MAGNET SYSTEM PLUS roll rods or magnet blade squeegee** (optional with mechanical blade squeegee in vertical or horizontal position). Available in different executions and **working widths from 500 mm to 4800 mm** with repeat sizes of 640 mm to 1020 mm, and special repeat sizes on demand.

Achieve unique results such as low-weight add-ons, or anti-slip patterns through dot coating.

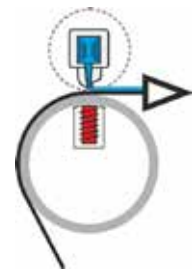
SINGLE SCREEN COATING & PRINTING



**Single screen coating
with
magnet blade squeegee**



**Single screen coating
with
magnet roll rod**

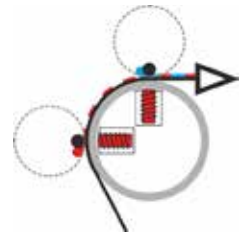


**Single screen coating
with
MAGNOJET slot
coating system**

DOUBLE SCREEN COATING & PRINTING



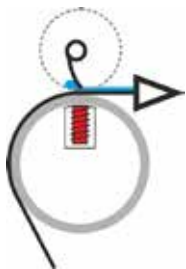
MAGNOROLL with two screen coating modules



**Double screen coating
with
magnet roll rods**

The **MAGNOROLL** machine can be **optionally** equipped with **two rotary screens** for simultaneous application.

FOAM / PASTE COATING



**Single screen coating
with
magnet blade squeegee**

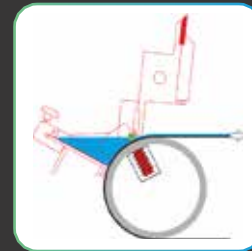


**Single screen coating
with
magnet roll rod**

MAGNET ROLL COATING, FINISHING & LACQUERING



MAGNOROLL coating machine with MR 11 technology



**Magnetic
Full-Surface
Roll Coating
MR 11**

Highest precision, maximal efficiency and uniform application can be achieved evenly with different viscosity coatings. Therefore, **ZIMMER AUSTRIA** developed the **Full-Surface Roll Coating** and **Low-Add-On Coating** modules, with the **ZIMMER MAGNET SYSTEM PLUS**. These techniques ensure high-class results while optimizing the amount of resources used, especially for minimum quantity application.

Magnetic Full-Surface Roll Coating with the **ZIMMER MAGNET SYSTEM PLUS** can be applied in an adjustable range from 11 o'clock to 12 o'clock position. The roll squeegee is positioned with side limiters and can be either free revolving or driven by a servomotor, to adjust the speed to the fabric.

The application medium is pumped through an oscillating feeding device controlled by a level sensor. **Working width:** up to 5600 mm



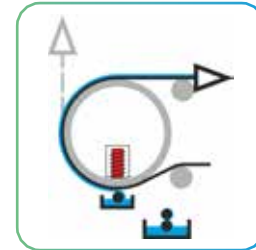
Magnetic Full-Surface Roll Coating MR 11



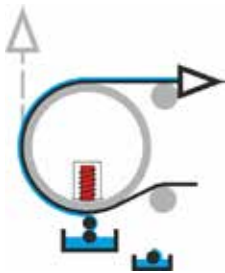
Paste reservoir with side limiters



Magnetic Full-Surface Coating MR 6



Magnetic Full-Surface Coating MR 6 with one roll rod



Magnetic Full-Surface Coating MR 6 with two roll rods

COATING, FINISHING AND LACQUERING FOR MINIMUM QUANTITY APPLICATION

The **Magnetic Low-Add-On** module MR6 is designed to achieve maximal efficiency by using fewer resources. This technique can be operated with the magnet roll rod, either with one or two roll rods. Perfect and optimum uniform application amount of various coating chemicals, which will reduce costs and minimize the rejection rate. Therefore overall productivity can be enhanced tremendously, while having less impact on the environment.

The amount applied to the fabric is regulated through the surface structure of the roll rods that are attracted by the **ZIMMER MAGNET SYSTEM PLUS**, that guarantees a 100% uniform application. Optimal for very low viscosities and minimal application.



One roll rod



Two roll rods



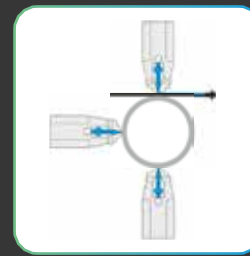
Two roll rods

MAGNOJET

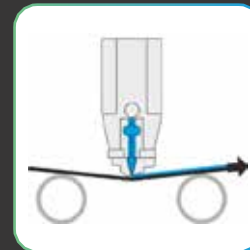
SLOT FOAM PASTE COATING



MAGNOJET direct application



MAGNOJET
direct
application
over-roll

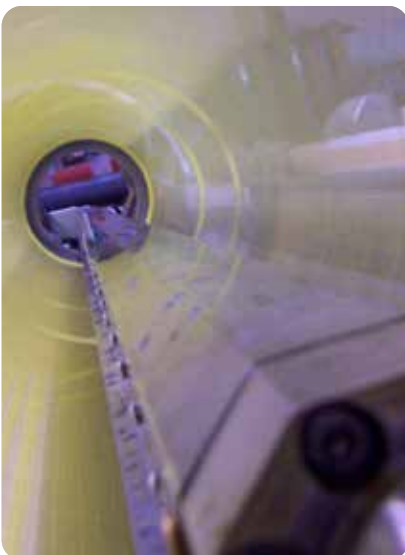


MAGNOJET
direct
application
over-air

The **MAGNOJET slot coating system** was especially designed for controlled application with foam or paste and can be installed in different working positions, either **directly over-roll** for surface coating or directly over-air for deep penetration coating, as well as **inside a screen**. The integrated automatic inline washing unit ensures increased productivity. For enhanced efficiency throughout the entire coating process additional accessories are recommended, such as a foam mixing unit with software controlled weight measuring system or a constant substance feeding pump with an inline flow meter for optimal paste coating results.

Magnetic Full-Surface Roll Coating with the **ZIMMER MAGNET SYSTEM PLUS** can be applied in an adjustable range from 11 o'clock to 12 o'clock position. The roll squeegee is positioned with side limiters and can be either free revolving or driven by a servomotor, to adjust the speed to the fabric.

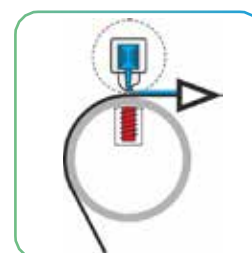
The application medium is pumped through an oscillating feeding device controlled by a level sensor.
Working width: up to 5600 mm



MAGNOJET inside a screen

MAGNOJET ADVANTAGES

- No contact with air till the outlet of the slot
- No pollution, no creation of foam during paste application and no extra amounts of application media necessary
- Hassle-free processing of foam or paste
- Avoids evaporation of liquids
- Controlled pressurized application
- High speed application possible
- Fast installation due to slim design



Screen
coating
MAGNOJET
slot coating
system



MAGNOJET with inline washing unit



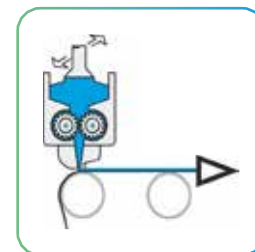
MAGNOJET foam coating unit installed in stenter frame line

VARIOPRESS FOAM APPLICATION SYSTEM

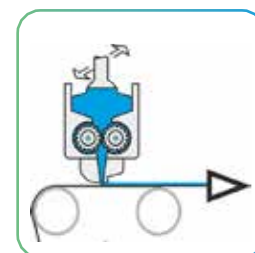
Especially designed for **coating with stable and meta-stable foams**. **VARIOPRESS** is a high precision unit, that gives 100% control of the foam application amount, independent of line speed, web tension and/or absorbance characteristic of the coated web. Determined by the speed of the tooth gears, the foam application amount and penetration into the material is adjustable from 0% to 100%. Thereby, the **VARIOPRESS** foam application system ensures optimum foam coating results on a constant level.



VARIOPRESS foam application with adjustable gear speed

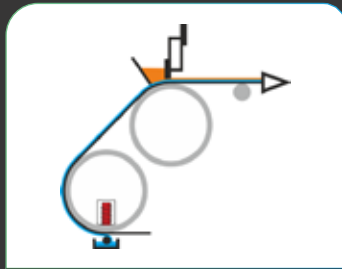


VARIOPRESS
foam
application
over-roll



VARIOPRESS
foam
application
over-air

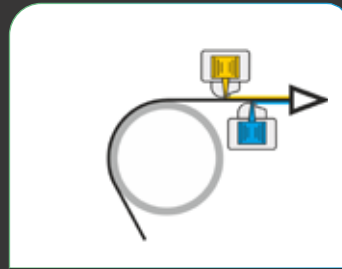
SPECIAL DESIGNS & UNIQUE COATING PRINCIPLES



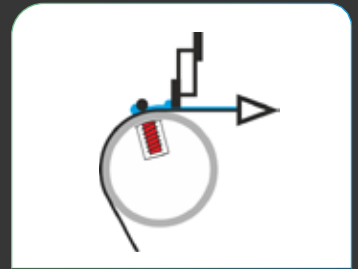
WET-IN-WET



Knife on top
MAGNOJET
from bottom in
horizontal position



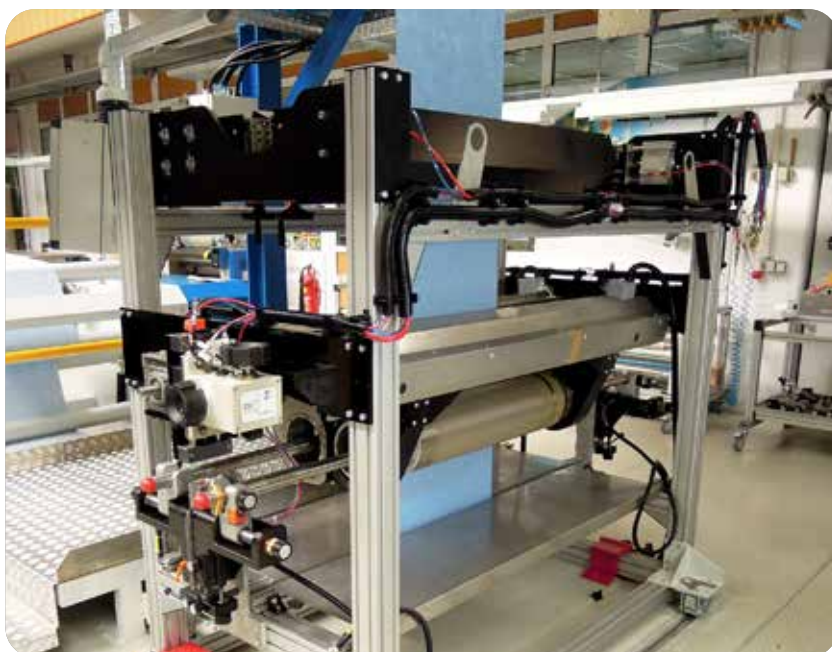
MAGNOJET
on top and
from bottom in
horizontal position



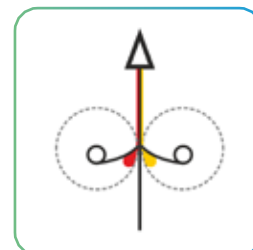
Magnetic Roll
coating MR 11
with Knife on top

SUCCESS THROUGH TECHNOLOGY - With solutions from **ZIMMER AUSTRIA**, you can produce faster, more precise, and thus more efficiently. From the first consultation, the delivery, the installation and continuous service, we offer you outright support. Together with our clients we constantly work on further enhancing the coating process to develop breakthrough solutions to shape the world of tomorrow. Innovative products require unique coating principles. A few examples of specially designed coating systems or combinations of different coating systems are shown below.

Work together with our experienced technologists and test innovative coating techniques, such as double-sided screencoating, at our **TECHNOLOGY APPLICATION CENTER**.



MAGNOJET direct application



Double-sided screen
coating with blade
squeegee in vertical
position



Double-sided knife
coating in vertical
position



Double-sided
magnetic roll rod
coating in vertical
position

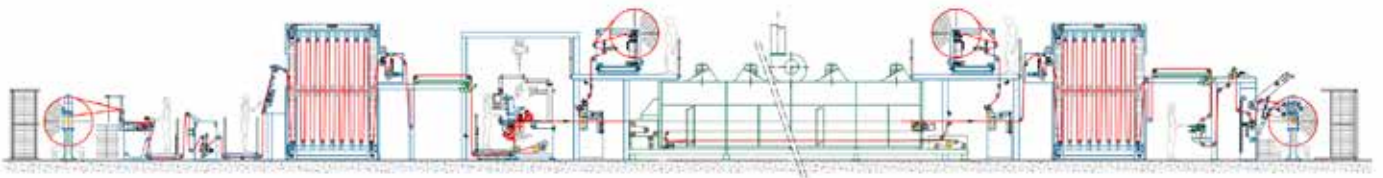
COATING LINES

ENGINEERED FOR INNOVATION

High-quality coating results require perfectly synchronized technologies throughout the entire process. **ZIMMER AUSTRIA** therefore offers premium one-stop coating lines for uniform liquid, paste, lacquer, and foam application on a wide range of substrates, including nonwovens, textiles, plastics, carpets, glass fibre, foils, and other innovative materials. From unwinding and winding units to web guiding, coating, energy-efficient drying, cooling, and after-treatment systems, each complete line is tailored to your exact production needs.

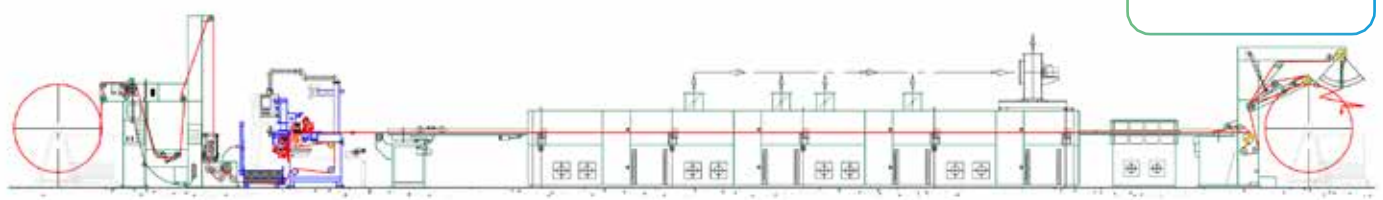
NONWOVEN COATING AND PRINTING LINE

Designed for all kinds of coating, finishing, printing and laminating processes, especially for high-end products in the nonwoven industry.



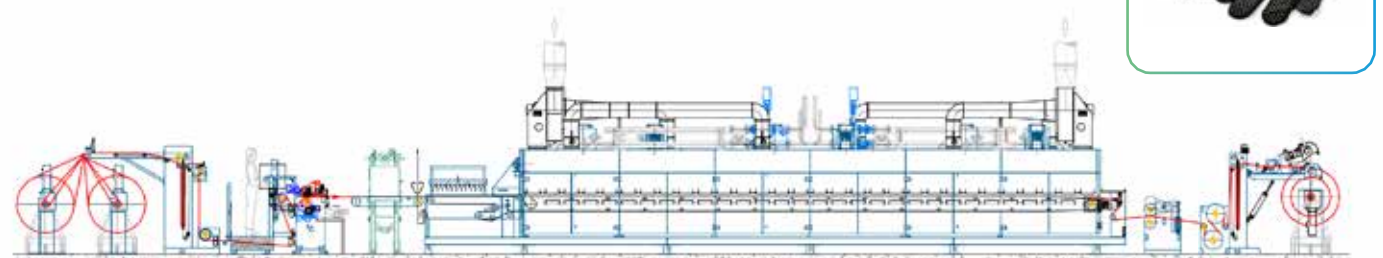
DENIM COATING LINE

Designed for heavy weight denim fabrics, as well as high-elastic fashion jeans.



DOUBLE DOT COATING AND LAMINATION LINE

Designed for light weight, sensitive and elastic interlining fabrics for the fashion and clothing industry.



ENERGY EFFICIENT DRYING

The drying process has a major influence on the final quality of the coated material. If the coating lines require roller bed or conveyor belt dryer, **ZIMMER AUSTRIA** will be incorporating the in-house designed and built **COMPACT HC dryer**.

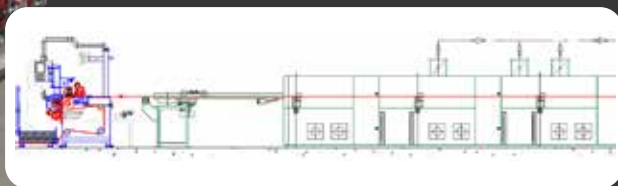
ZIMMER AUSTRIA has developed high-quality dryer layouts with **THERMOCURE technology**, to guarantee a perfectly controlled drying process tailored to the specific product requirements. All dryers are designed with optimized interior geometry for high energy efficiency and uniform chamber temperature, equipped with self-monitoring and state-of-the-art measuring and regulation techniques.



Stenter frame

STENTER FRAMES

ZIMMER AUSTRIA is combining the coating machines with different stenter frames from well-known stenter frame manufacturers according to customer's request.



HOT AIR DRYER

The modular construction of this high efficiency hot air dryer with conveyor belt can be designed with one, three, or up to seven passages for higher productivity. Especially for thick permeable substrates such as coated and wet textiles or nonwovens.



HOT AIR DRYER IN LAY-ON-AIR EXECUTION

Lay-on-air floating fabric guiding in the entry zone of the dryer, combined with a conveyor belt. Lay-on-air-nozzles for contact-free surface drying, especially for fully penetrated fabrics.



LABORATORY SOLUTIONS FOR COATING & TESTING

For perfect preparation before or during the coating process **ZIMMER AUSTRIA** offers a wide range of high-quality sampling machines as well as laboratory machines and devices such as knife coating system, rotary screen application system with roll rod and blade squeegee, magnet roller application and foam application systems are available in working widths from 400 mm to 1000 mm.



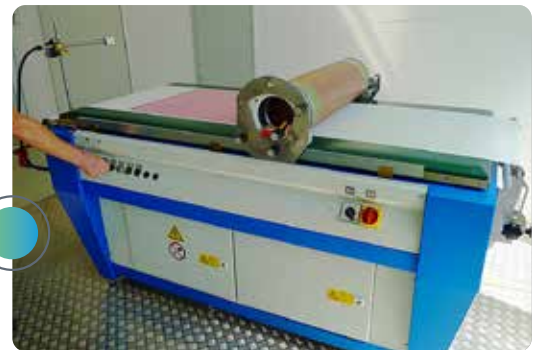
LABORATORY LINE
KNIFE COATING



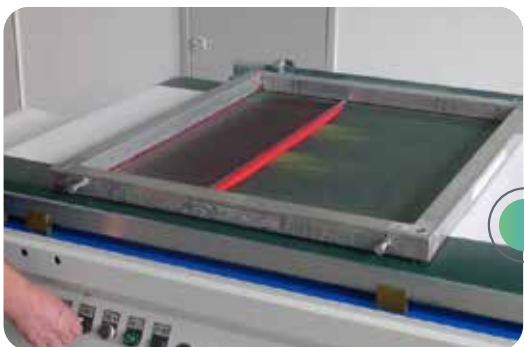
LABORATORY TABLE
KNIFE SAMPLE COATING



LABORATORY TABLE
LAMINATING



LABORATORY TABLE
ROTARY SCREEN STRIKE-OFF



LABORATORY TABLE
FLATSCREEN STRIKE-OFF

TECHNOLOGY CENTER

INNOVATION IN ACTION

EXPERIENCE INNOVATION. ENGINEER SOLUTIONS.

Where high-tech meets real-world application: our Technology Center is the place where pioneering processes are developed, new applications are tested, and customers benefit from our expertise, experience, and state-of-the-art equipment.

DEVELOPMENT & REAL-WORLD TESTING

At the heart of our innovation process, new technologies are developed and tested under real production conditions on textiles, technical materials, and specialty products. From concept to completion, we deliver cutting-edge printing & coating solutions with maximum precision – always by your side.

APPLICATION EXPERTISE. CUSTOMER PARTNERSHIP.

From product samples and process optimization to new materials, customer solutions are tested directly on original substrates. This ensures reliable, reproducible results that are fully ready for production.

TRAINING, WORKSHOPS & KNOWLEDGE TRANSFER

From workshops and operator training to product development, our Technology Center is a hub for knowledge, practical expertise, and innovation – always at the forefront of our technology.

R&D

Sampling

Training

Workshops

Convention





AFTER SALES EXCEL WE STAY BY YOUR SIDE. FOR THE ENTIRE MACHINE LIFECYCLE.

OUR COMMITMENT GOES FAR BEYOND MACHINE DELIVERY.

At **ZIMMER AUSTRIA** Klagenfurt, we support our customers throughout the entire lifecycle of their **coating** and **finishing systems** – from commissioning and preventive maintenance to spare parts, upgrades, process optimization, and expert technical support.

With highly skilled specialists, fast response times, and global service availability, we ensure maximum uptime, long-term performance, and reliable production processes worldwide.

RELIABLE. PROACTIVE. WORLDWIDE.



TECHNICAL SUPPORT

Our experienced service technicians support you with troubleshooting, maintenance, and commissioning – remotely or directly on site. Fast, solution-oriented, and always working in close partnership with your team.



SPARE PARTS & COMPONENTS

Operating 24/7 puts high demands on machines and wear is inevitable. We ensure maximum availability with a well-stocked central warehouse and regional emergency stocks, providing fast delivery of original spare parts in tested, certified quality.



SOFTWARE SUPPORT

Continuous innovation also drives machine electronics. Tailored software upgrades ensure customer-specific adaptation, maximum efficiency, long-term reliability, and future-ready performance.



Nonwoven coating and printing line

THE DIFFERENCE. ENGINEERED BY ZIMMER AUSTRIA.

Built on **decades of experience**, **ZIMMER AUSTRIA** designs tailor-made coating lines that deliver **outstanding results** throughout the entire process while minimizing resource and energy consumption.

With precision-engineered solutions, we help our customers make the difference and accelerate their success.

FIND THE PERFECT TECHNOLOGY FOR YOUR BUSINESS

ROTASCREEN TG/TU | Screen Printing

MAGNOPRINT | Flatscreen Printing

MAGNOROLL | Coating Machines & Lines

FINISHING SYSTEMS

SPECIAL SOLUTIONS

CONTRACT MANUFACTURING



GET IN TOUCH

www.zimmer-austria.com

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SCREEN & COATING SYSTEMS



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