

PIONEERING INNOVATIONS
FOR 150 YEARS

ZIMMER AUSTRIA | SCREEN & COATING SYSTEMS

Zimmer
AUSTRIA

up to 120 m/min



THE MOST

COST EFFECTIVE METHOD

FOR HIGH QUALITY

MASS PRODUCTION

ROTASCREEN.TG/TU
| ROTARY SCREEN PRINTING

AUSTRIA
WORLD CLASS
PARTNERS

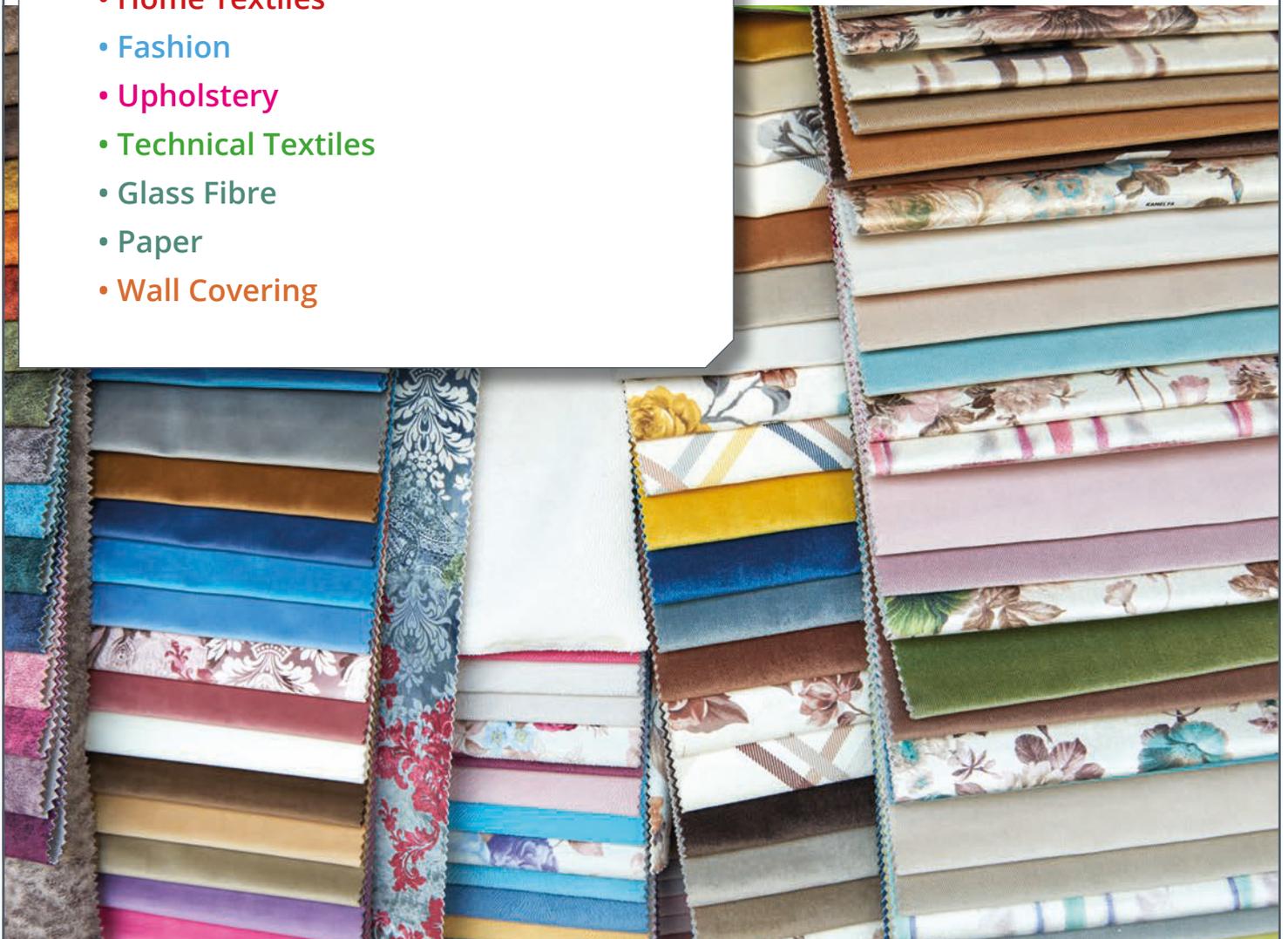
www.zimmer-austria.com

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 industry. ZIMMER has shaped the market with **pioneering innovations and revolutionary technologies**. In our century of digitalisation and industry 4.0, 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** and **flexibility**.

With the **knowledge for 150 years ZIMMER AUSTRIA** is constantly endeavouring to enhance our customer's competitive advantage by providing the most efficient machines in order to ensure highest possible results for various **application areas**:

- Home Textiles
- Fashion
- Upholstery
- Technical Textiles
- Glass Fibre
- Paper
- Wall Covering



SUCCESS THROUGH TECHNOLOGY

The new developed and revised rotary screen printing machines **ROTASCREEN.TG/TU** opens a wide spectrum of applications to cover actual and future market requirements. Executed either with the compact and solid **G-Type printing head with closed bearing system** or the **U-Type printing head with open bearing system** for fast, easy and save set-up of the screens, colour pipes and roll rods simultaneously during design changes.

ROTASCREEN textile printing machines with **ZIMMER MAGNET SYSTEM PLUS** are designed in modular constructions, in order to ensure high quality results with single- or multi-colour printing on different substrates.



Take advantage of our pioneering technologies like the world-famous **ZIMMER MAGNET SYSTEM PLUS ROLL ROD TECHNOLOGY**, which combines the advantages of the revolutionary Magnet System with the traditional Blade technique. It guarantees an uniform application over the complete working width.

ROTASCREEN KEY-FEATURES

FASTEST PRINTING SPEED

up to 120 m/min

MULTI-COLOUR INTERMITTENT PRINTING

with up to 24 printing stations

INDIVIDUAL WIDTH ADJUSTMENT

of both printing heads allow narrow printing on any wider machine from 165 to 320 cm working width

STABLE, RELIABLE & FLEXIBLE

with closed (TG) or open (TU) bearing system

ECO-FRIENDLY & ENERGY EFFICIENT

due to the ECO-C1 printing paste recovery and water saving system

HIGH DEPENDABILITY AND SUSTAINABILITY

due to the compact and solid construction

EASY HANDLING & SHORT SET-UP TIME

with the ACR-5-Control System with automatic repeat setting, design memory and quick reproduction of re-orders

HIGH REPEAT ACCURACY

for durable prints on any fabric material

AUTOMATIC REPEAT SIZE ADJUSTMENT

from 64 cm to 102 cm

DIGITAL SYNCHRONIZATION

between the screens and the printing blanket guarantees high printing accuracy at any printing speed

VARIOUS SQUEEGEE HOLDING DEVICES

according to our customer's individual needs

VARIOUS COLOUR APPLICATION SYSTEMS

with MAGNET SYSTEM PLUS or blade squeegee

FINEST PRINTING QUALITY

in vibrant and bold colours



ROTASCREEN.TG - CLOSED BEARING SYSTEM

Our customers rely on our proven technologies and technical know-how since many decades. The very solid and compact construction of the G-Type printing head with closed bearing system ensures an optimum printing accuracy for narrow-width as well as wide-width printing at any printing speed of up to 120 meters per minute.

ADVANTAGES:

- **Optimum view** on to the printed fabric between each printing station.
- **High dependability and sustainability** due to the compact and solid construction for a low maintenance.
- **Easy handling and quick adjustment** of the printing parameters, such as working width, magnet power and the automatic repeat-setting (with design memory for quick re-production of design), due to the **Operating Panel and Repeat Navigator on each printing station**.
- **Individual width adjustment of both printing heads** allow narrow printing on wider machines.
- **Digital Synchronization** between the screens and the printing blanket drive guarantees high printing accuracy at any printing speed of up to 120 meters per minute. Either with **one or two servomotors**.



ROTASCREEN.TG - screen holding device



ROTASCREEN.TG - screen set-up



ROTASCREEN.TG - squeegee installation



ROTASCREEN.TU - OPEN BEARING SYSTEM

Additionally to all advantages of the TG system, the U-Type printing head with the open bearing system offers fast, simultaneous and safe handling and set-up of the screens together with the colour pipes during design changes. This system is optimal for customers who require a high amount of flexibility in their production process.

ADVANTAGES:

- **High flexibility and productivity** due to quick set-up time with pre-assembled screen and squeegee system.
- **Fast, safe and easy handling** during design changes - screens, colour pipes and roll rods can be installed and changed simultaneously. Therefore less working time is needed.
- **Optimized roller bearing** for perfectly smooth screen rotation.
- **Individual width adjustment of both printing heads allow** narrow printing on wider machines.
- **Digital Synchronization** between the screens and the printing blanket drive guarantees high printing accuracy at any printing speed of up to 120 meters per minute. Either with **one or two servomotors**.



Pre-assembly of screen and squeegee



Installation of pre-assembled system



ROTASCREEN.TU open bearing system

ROTASCREEN MACHINE DETAILS | FEEDING DEVICE OPTIONS

Different feeding and exit device options, adaptable to various textile qualities. Standard woven, sensible knits, terry towels and even blankets, single-strand or double-strand tubular goods will be guided from the roll or trolley and glued onto the printing blanket. Furthermore **ZIMMER AUSTRIA** is the new and exclusive manufacturer of the worldwide recognized **KÄLIN fabric cleaning appliances**, since the merger in spring 2016.



1 | The unbatching device comes with a stepless automatic digitally controlled speed control drive system, which transports any kind of woven and knits from small or large rolls onto the printing machine.



2 | Dust and lint removal device new and improved, for most efficient fabric cleaning results. The standard basic suction system optionally can be combined with a brushing, blowing or beating system. One-side or both-side cleaning may also be opted.



3 | The high quality lattice roller in combination with soft air blowing edge uncurlers assures tensionless transport from the roll or trolley onto the printing blanket.

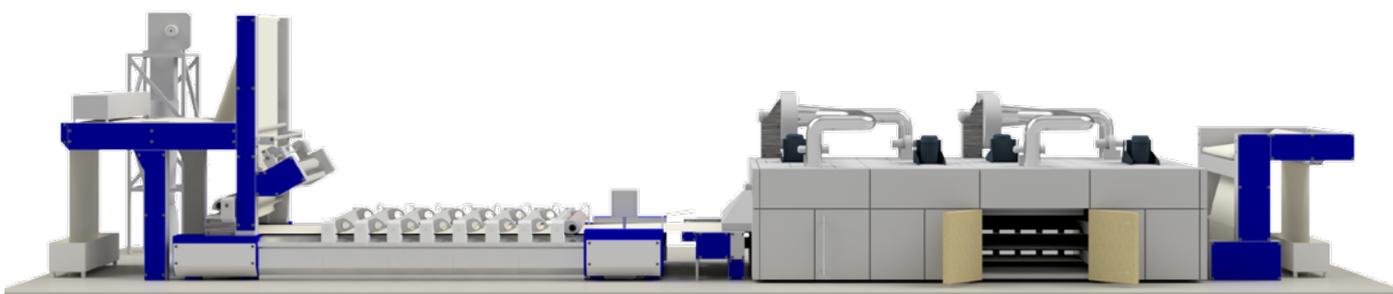
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ROTASCREEN MACHINE DETAILS | GLUEING AND WASHING

Different feeding and exit device options, adaptable to various textile qualities. Standard woven, sensible knits, terry towels and even blankets, single-strand or double-strand tubular goods will be guided from the roll or trolley and glued onto the printing blanket. Furthermore **ZIMMER AUSTRIA** is the new and exclusive manufacturer of the worldwide recognized **KÄLIN fabric cleaning appliances**, since the merger in spring 2016.



4 | Wet glueing device with optimized squeegee application system and automatic glue feeding pump.



5 | Thermoplast glueing device with cloth heating shield and infrared heating elements. For perfectly uniform glueing of synthetic fabrics.



8 | Printing blanket washing device with high quality brushes and water recycling system for a minimum of fresh water consumption.

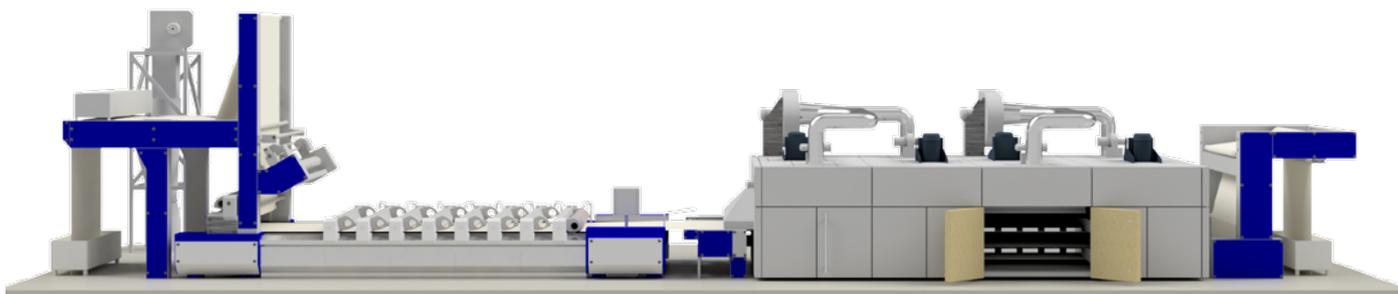
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ROTASCREEN MACHINE DETAILS | OPERATING

An automatic high-speed printing machine is as good as its electronic control systems. Therefore the new ROTASCREEN printing machine comes with a totally integrated, but simple to handle computer control system. The **ACR-5-control system** permits easy handling, short set-up time, automatic repeat setting, design memory and quick reproduction of re-orders. In order to avoid all negative possible heat influences, all top quality electronic components are mounted in air-conditioned cabinets.



Operating panel | operator side



Operating panel | opposite side

6 | The touchscreen main control panel as well as all adjustment buttons on the machine come in your mother language. The CAN-BUS system connects all controls, drives and sensors on the printing machine. Printing design memory eases the job for your repeat orders.

7 | Operating panel and repeat navigator on each printing station to ensure easy handling and quick adjustment of:

- the **working width** and other printing parameters
- the **magnet power**
- the **automatic repeat-setting**
(with design memory for quick re-production of designs)



ROTASCREEN MACHINE DETAILS | THERMOCURE DRYING

The drying process has a major influence on the final quality of the printed fabrics. Therefore **ZIMMER AUSTRIA** developed several dryer layouts to guarantee even and perfectly controlled drying of all kinds of fabrics. The **modular construction** of the high efficiency **COMPACT.HC hot air nozzle dryer** is available with:

- various heating medium options - steam, thermal oil, hot water, electricity, gas burner
- various options of fabric exit units - e.g. plaiter for single-web, batcher and/or center winder, ...
- various configurations - e.g. removable hot air nozzle elements, additional polymerizing zone, ...



9 | The COMPACT.HC dryer with an operating temperature of 90°C to 200°C is available on ground floor level or elevated on a substructure. With optimized interior geometry for high energy efficiency and uniform chamber temperature. Self-monitoring and state-of-the-art measuring and regulation techniques.



10 | Various fabric exit devices or smooth and reliable web guiding at any speed. Plaiter with e.g. J-Box, antistatic devices, inspection table or center winder.

i Please see separate leaflet | **THERMOCURE high capacity hot air dryer**

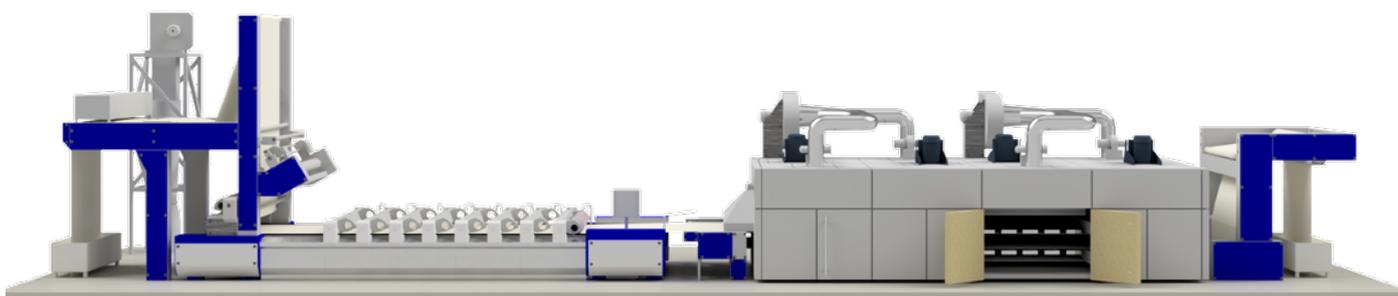
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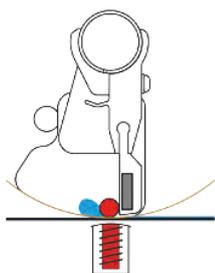
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COLOUR APPLICATION SYSTEMS

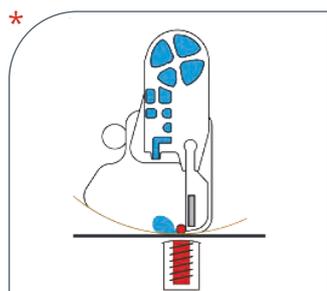
The modular squeegee construction* allows an individual exchange of parts like colour pipes, main body, magnet holding ledges and side limiters. All parts are made either of stainless steel, aluminium or CFK-carbon fibre. Different colour application systems according to your individual requirements:



RG-S1-ST-ECO ROLL SQUEEGEE

Standard colour pipe with magnetic holding ledge

for any roll rod diameter from 8 to 30 mm

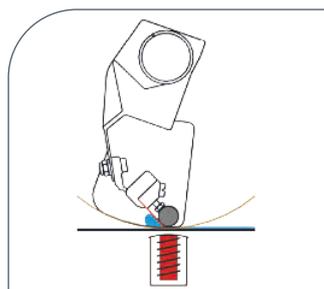


RG-S2-BV ROLL SQUEEGEE



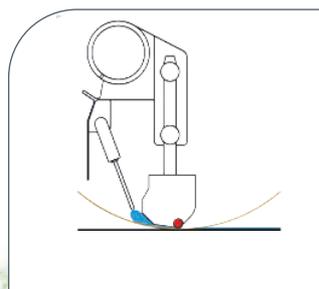
The **ZIMMER AUSTRIA BVS micro channel system** for more precise paste distribution

optional for all standard colour pipes



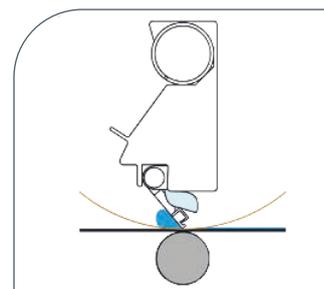
VARIOCOLOR MAGNET BLADE SQUEEGEE

Ultra light and versatile



VARIOCOLOR ASG APPLICATION SYSTEM

All advantages of the **Zimmer Magnet System Plus** and the blade squeegee system combined



AIR-FLOW BLADE SQUEEGEE

Perfectly even colour application

CUSTOMIZED SOLUTIONS FOR OUTSTANDING PERFORMANCE | SQUEEGEE HOLDING DEVICES

High quality squeegee holding devices in various execution, mounted either on the machine frame or directly onto the printing head. Adapted, designed and manufactured according to our customer's individual needs.



RH-ECO-U



RH-ECO-G

RH-ECO-U *fast & safe*

The standard executions mounted on the printing head especially designed for open bearing system machines

RH-ECO-G *compact & solid*

The standard executions mounted on the printing head especially designed for closed bearing system machines

RH-M-ASG

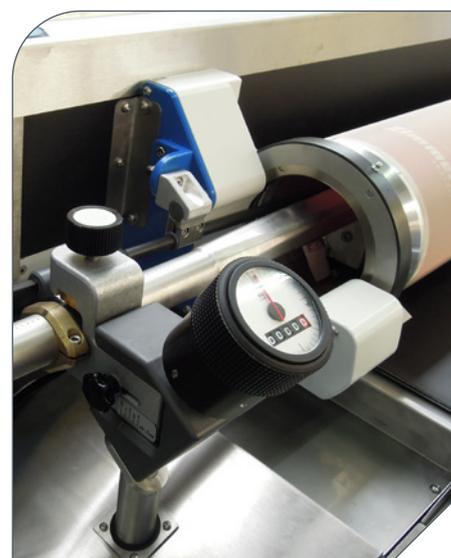
High-class execution for stepless fine adjustment of the ASG Variocolor application systems

RH-M Air-Flow

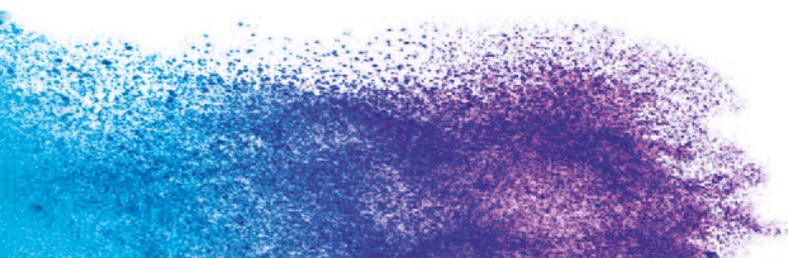
Mounted on the printing machine frame body with pneumatic adjustment for the Air-Flow blade squeegee



RH-M-ASG



RH-M Air-Flow



HIGH EFFICIENT AND ECO-FRIENDLY

Maximize your productivity while taking care for the environment at the same time!



Standard Pumps



Underfloor Pumps

PUMPS

High quality results with all kinds of colour paste viscosity.

Stainless steel pumps in various executions:

- STANDARD PUMPS
- UNDERFLOOR PUMPS

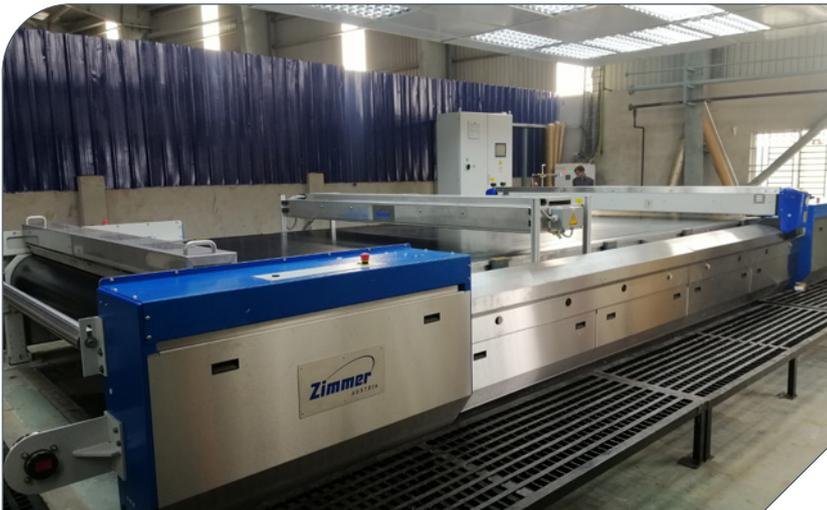
ECO-FRIENDLY PRINTING PASTE RECOVERY WITH OPTIONAL WATER SAVING SYSTEM

Save money, enhance productivity and take care for the environment. With the new developed **ZIMMER AUSTRIA ECO-C1 cleaning system** water consumption can be reduced by up to 80% per year. This means that just 1/3 of the regular time is needed, for the total washing process of the color feeding circuit.

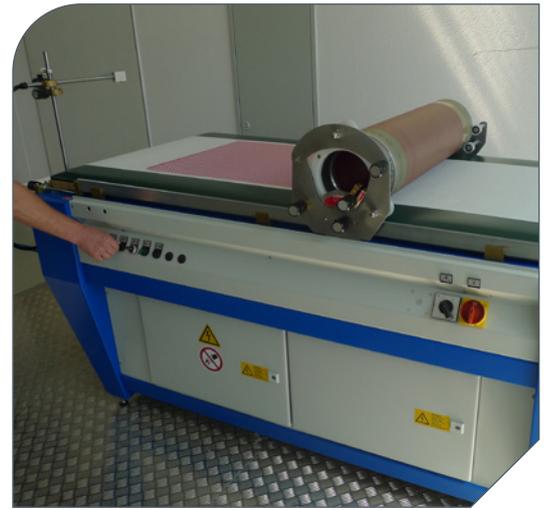


ROTASCREEN SAMPLE & LAB MACHINES | ADDITIONAL EQUIPMENT

For the perfect preparation prior to the printing production **ZIMMER AUSTRIA** offers a wide range of high quality **sampling and laboratory machines** for real-size sample printing with closed or open bearing system, and development and verification of paste viscosities, colour concentration and magnet power fine adjustment. Furthermore you may opt for additional equipment such as **rotary screen making equipment** to enhance your production processes or **screen and squeegee washing machines** for quick and efficient cleaning.



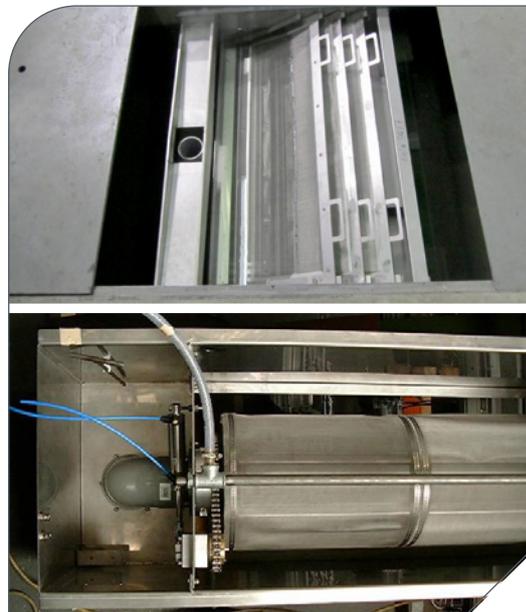
Midi-II-R sample printing machine



Mini-MD-R strike-off machine



Screen washing machine



Flat filter (standard) / Drum filter (optional)

Screen and squeegee washing machines for either one, two, three or four screens at a time and up to six squeegees. To maintain high quality printing results **ZIMMER AUSTRIA** offers a wide range of rotary screen making equipment, such as: polymerization chambers, screen drying and storing chambers, screen developing-, endring glueing-, screen coating machines, ...



Screen coating machine

 For more details please see separate leaflet

FROM IDEA TO INNOVATION

Accelerating our client's success is at the heart of our DNA. At our **TECHNOLOGY.APPLICATION CENTRE** in Klagenfurt (Austria) we provide you with comprehensive support and advice from the initial idea right up to your production print- or coating line as well as the development of new applications.

Run trials or even small-scale productions to consequently improve your products or even develop new innovative solutions. Our experts will advise you which solution fits best to your needs.

TECHNOLOGY.APPLICATION CENTRE KLAGENFURT: R&D | Sampling | Workshops & Training | Convention



Overview of the technology centre in Klagenfurt (Austria)





ROTASCREEN SPECIFICATIONS	TG closed bearing system	TU open bearing system
Working width	165 / 185 / 225 / 245 / 280 / 320 cm	
Number of printing stations	up to 24	
Repeat size adjustment	from 64 cm to 102 cm	
Print head	closed bearing printing head	open bearing printing head
Printing speed	up to 120 meters per minute	
Colour pipes	RG-S1-ST-ECO roll rod squeegee, Variocolor magnet blade squeegee, Variocolor ASG roll & magnet blade squeegee, Air-Flow blade squeegee * optional for all standard color pipes: the ZIMMER AUSTRIA BVS micro channel system	
Squeegee holding devices	RH-ECO-G, RH-M Air-Flow, RH-M-ASG	RH-ECO-U, RH-M Air-Flow, RH-M-ASG
Control system	ACR-5	
Dryer	Various dryer layouts for all kinds of fabrics	

FIRST IN QUALITY & FIRST IN SERVICE

PIONEERING INNOVATIONS FOR 150 YEARS



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