



spring 2017

○ up to 120 m/min



THE MOST
COST EFFECTIVE METHOD
FOR HIGH QUALITY
MASS PRODUCTION

ROTASCREEN.TG/TU

| ROTARY SCREEN PRINTING

MADE IN AUSTRIA

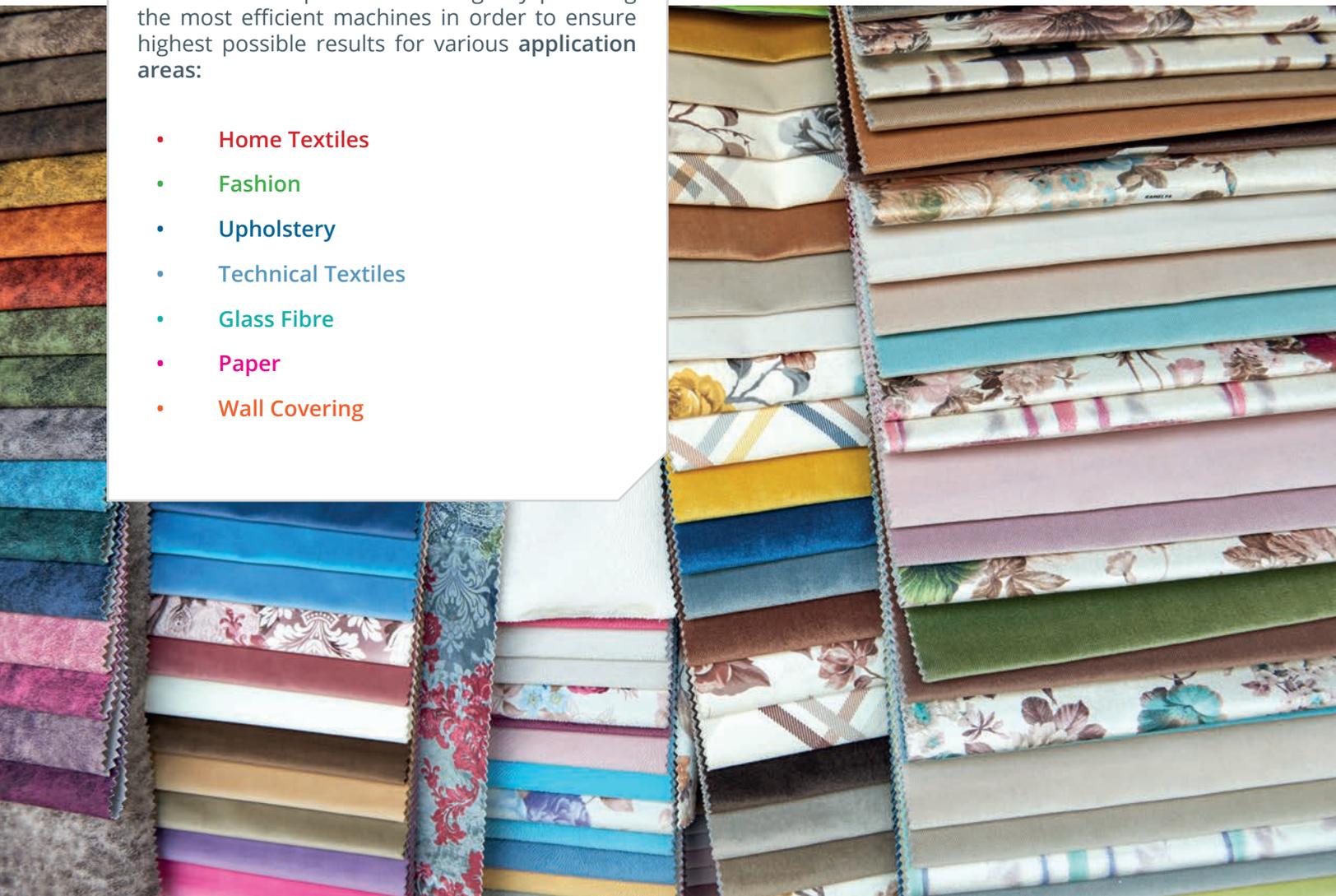


DRIVEN BY PERFECTION

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 of over 140 years** ZIMMER 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

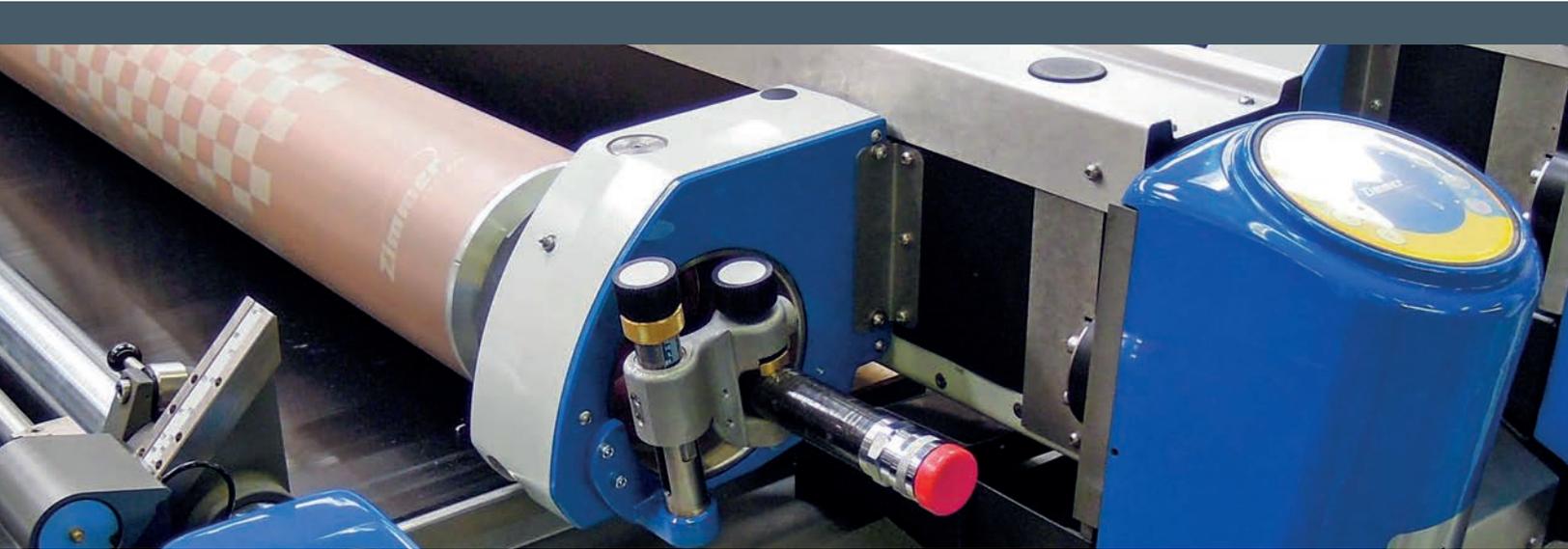
The new developed and revised rotary screen printing machines **ROTASCREEN.TG/TU** opens a wide spectrum of applications to cover actual and future market requirements. Executed either with the compact and solid **G-Type printing head with closed bearing system** or the **U-Type printing head with open bearing system** for fast, easy and save set-up of the screens, color 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-color 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-COLOR 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 COLOR APPLICATION SYSTEMS**
with MAGNET SYSTEM PLUS or blade squeegee
- **FINEST PRINTING QUALITY**
in vibrant and bold colors

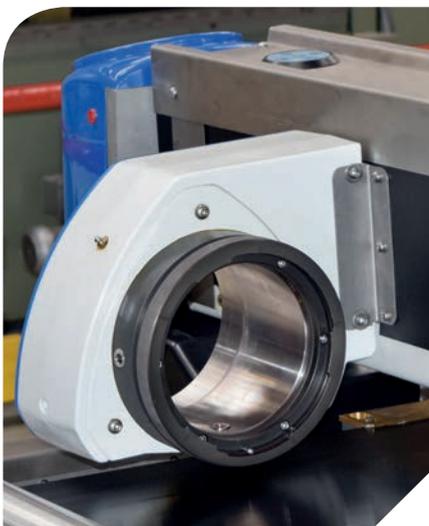


ROTASCREEN.TG - CLOSED BEARING SYSTEM

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**.



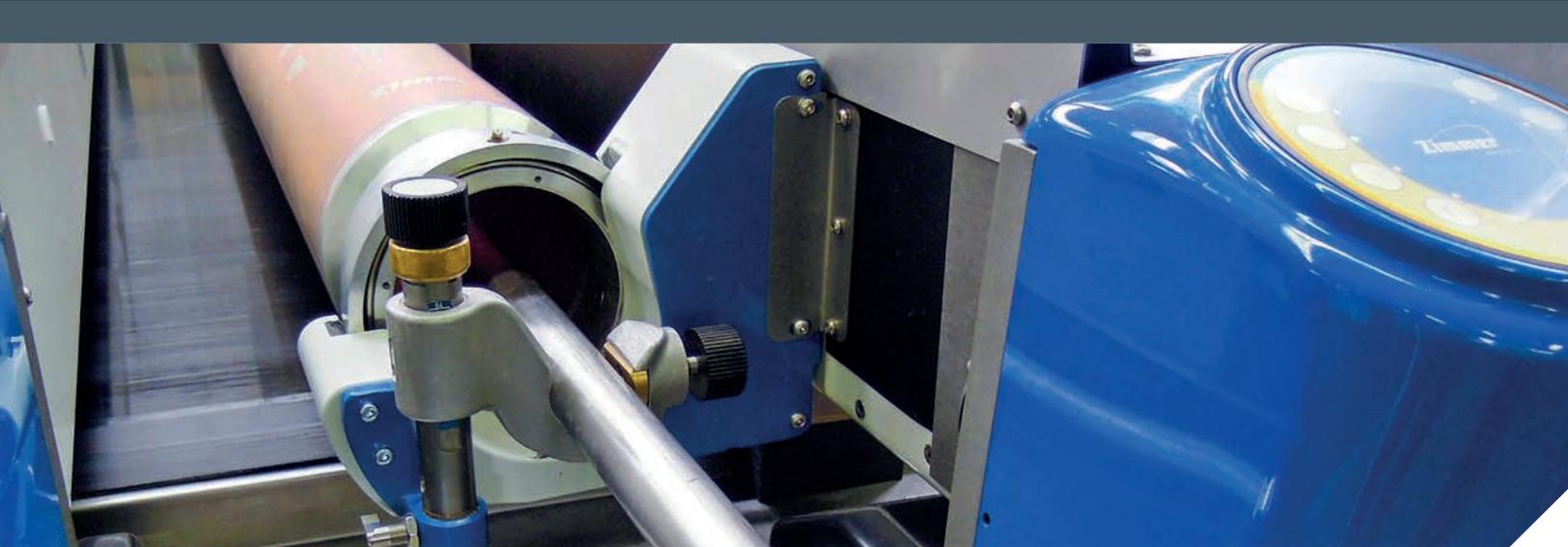
ROTASCREEN.TG - screen holding device



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 color 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, color 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-assembling 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. In various executions: brushing - suction - blowing with bevelled suction mouthpiece for one or both-side simultaneous cleaning of the fabric.



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.

1 | 2 | 3 | 4 | 5 |

6 | 7 |

8 |

9 |

10 |



ROTASCREEN MACHINE DETAILS - GLUEING AND WASHING



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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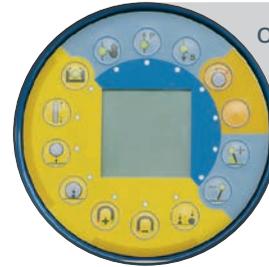
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ROTASCREEN MACHINE DETAILS - OPERATING

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. (For more details please see our separate dryer leaflet)

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

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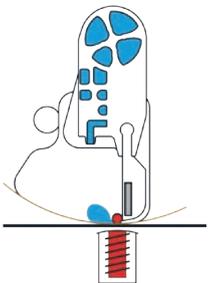
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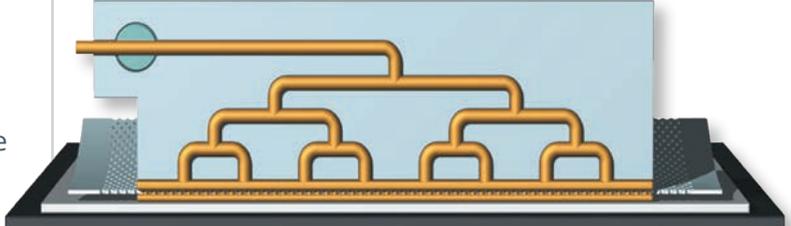


COLOR APPLICATION SYSTEMS

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



**RG-S2-BV
ROLL SQUEEGEE**
The ZIMMER AUSTRIA BVS micro channel system for more precise paste distribution
optional for all standard color pipes

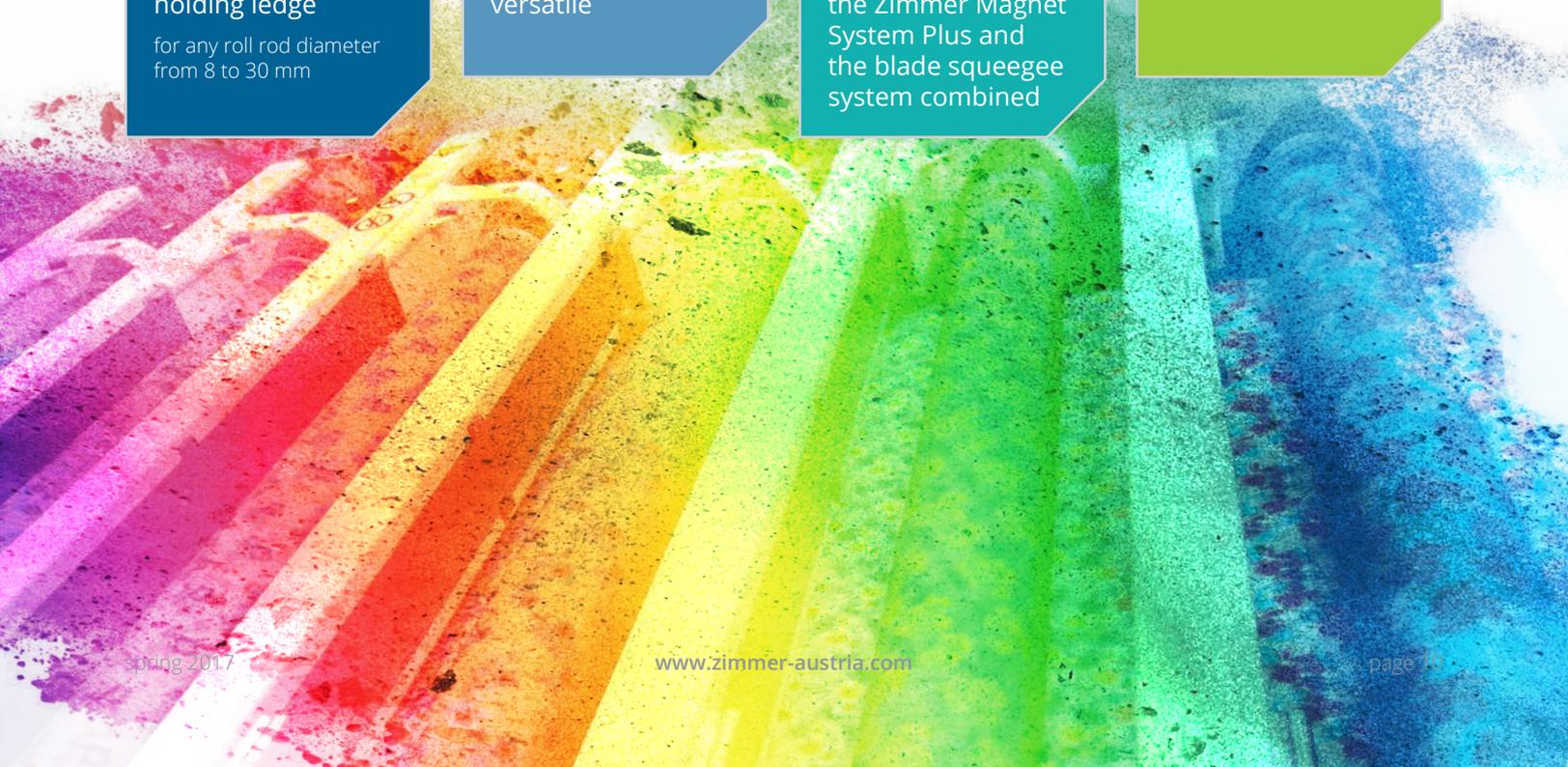


**RG-S1-ST-ECO
ROLL SQUEEGEE**
Standard color pipe with magnetic holding ledge
for any roll rod diameter from 8 to 30 mm

**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 color 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 execution mounted on the printing head especially designed for open bearing system machines

RH-ECO-G *compact & solid*

The standard execution 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 color 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.



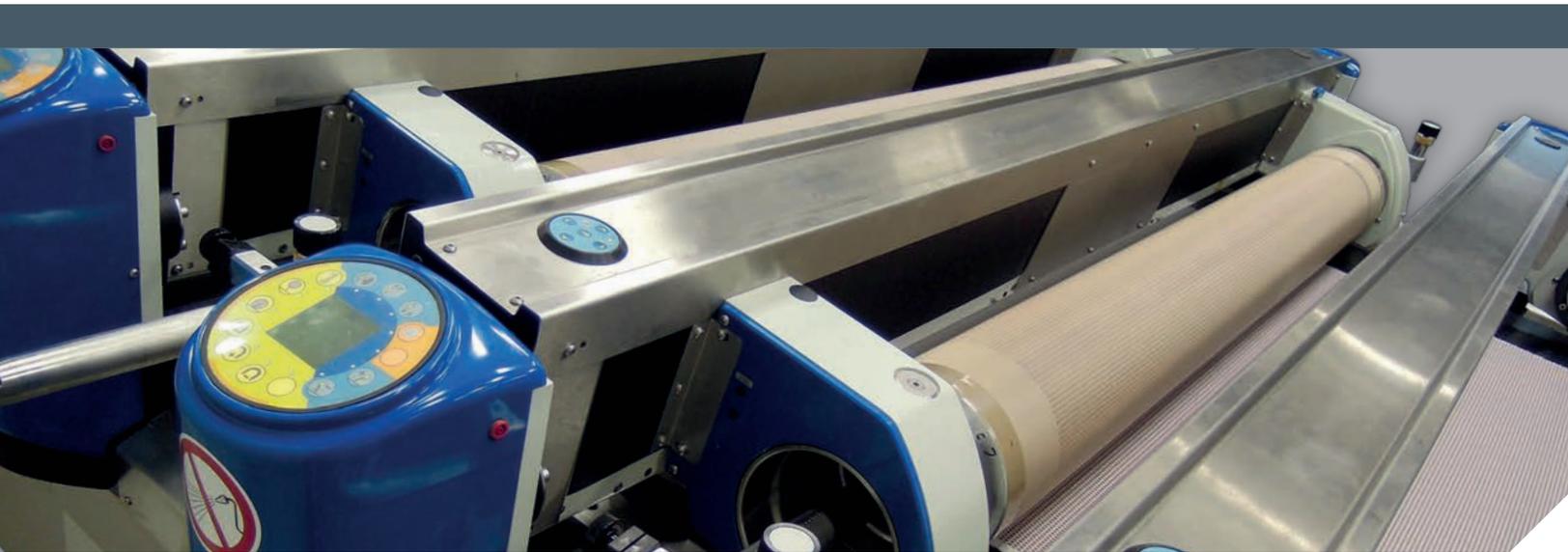
Advantages ECO-C1 cleaning system

PASTE RECOVERY

- Color paste recovery
- Better endurance
- Mounted below floor level - more space for handling
- "Same" System with / without paste recovery

WATER SAVING SYSTEM:

- Less handling time
- Less waste water
- Less fresh water required
- More steady color feeding



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	
Printing head	closed bearing printing head	open bearing printing head
Printing speed	up to 120 meters per minute	
Color 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	



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, color 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.



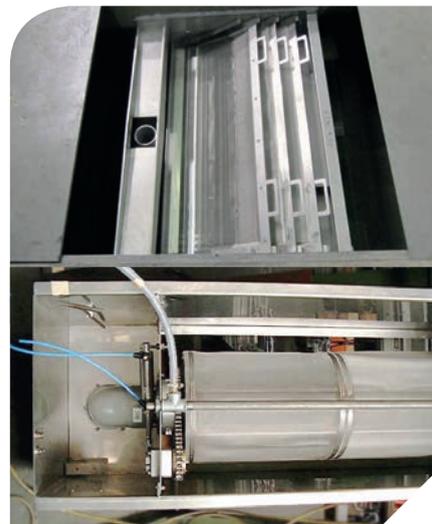
Midi-II-R sample printing machine



Mini-MD-R strike-off machine



Screen washing machine



Flat filter (standard) / Drum filter (optional)



Screen coating machine

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-, ending glueing-, screen coating machines, ... (For more details please see separate leaflet)

FROM IDEA TO INNOVATION - APPLICATION CENTRE KLAGENFURT

From Idea to Innovation - at our **TECHNOLOGY.APPLICATION CENTRE** in Klagenfurt 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.

R&D - Sampling - Workshops & Training - Convention



FIRST IN QUALITY & FIRST IN SERVICE

PIONEERING INNOVATIONS FOR MORE THAN 140 YEARS



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