

ROTASCREEN TG/TU

ROTARY SCREEN PRINTING



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

ONLINE VERSION



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**:

- Carpet Solutions
- Pile Fabrics
- Nonwoven Products
- Home Textiles
- Military Textiles
- Paper Solutions
- Apparel, Knits & Clothing
- Technical Textiles
- ...
- Terry Products
- Wall Covering



PRINT WITHOUT LIMITS!

MAGNET SYSTEM PLUS

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.

ZIMMER AUSTRIA designs, manufacture and delivers premium screen-printing machines, using both Rotaryscreen technologie (ROTASCREEN TG/TU) — each powered by the patented **MAGNET SYSTEM PLUS**.

Modular by design, Zimmer machines deliver vibrant, high-precision single- or multi-color prints on **a wide variety of substrates**: home textiles, upholstery, fashion, towels, banners, technical fabrics, wall coverings, carpets, glass fibre, foils & more. Ideal where consistency, flexibility and superior quality are essential.

WITH ZIMMER AUSTRIA YOU CAN MAKE THE DIFFERENCE

3 SUCCESS PILLARS FOR SUSTAINABLE ADDED VALUE



HIGHEST PRECISION, EVEN ON LARGE WORKING WIDTHS

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.



FORWARD-THINKING
IDEAS

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 screen printing techniques can be tested together with our expert technologists.



QUALITY CHECK

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 screen printing 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.

WHERE OUR SOLUTIONS COME TO LIFE



CARPET SOLUTIONS



HOME TEXTILE



APPAREL, KNITS & CLOTHING



TERRY PRODUCTS



PILE FABRICS



TECHNICAL TEXTILES



MILITARY TEXTILES



NONWOVEN PRODUCTS



PAPER SOLUTIONS



WALL COVERING

SUCCESS THROUGH ROTASCREEN TECHNOLOGY



**THE MOST COST EFFECTIVE
METHOD FOR HIGH QUALITY
MASS PRODUCTION**

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.



ROTASCREEN MACHINE DETAILS

GLUEING AND WASHING

Precision, Efficiency & Premium Finishing. Designed for maximum performance and consistent processing quality, our advanced technology ensures precise material handling and efficient production. From optimized adhesive application and uniform bonding of synthetic fabrics to sustainable cleaning with reduced water consumption – every component is engineered for **premium quality** and **reliable performance**.



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.



9

10

ROTASCREEN MACHINE DETAILS

OPERATING DEVICE

A high-speed printing machine is only as good as its control system. Therefore, the new **ROTASCREEN printing machine** features a fully integrated and user-friendly computer control system. The **ACR-5 control system** ensures easy handling, short set-up times, automatic repeat setting, design memory and fast reproduction of re-orders. To guarantee maximum reliability, all high-quality electronic components are installed in air-conditioned cabinets, protecting them from heat influences.

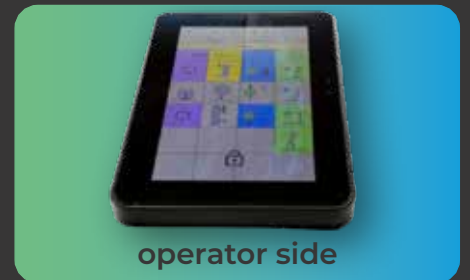


6 | The touchscreen main control panel as well as all adjustment buttons on the machine come in your mother language. The CAN-BUS system connects all controls, drives and sensors on the printing machine. Printing design memory eases the job for your repeat orders.

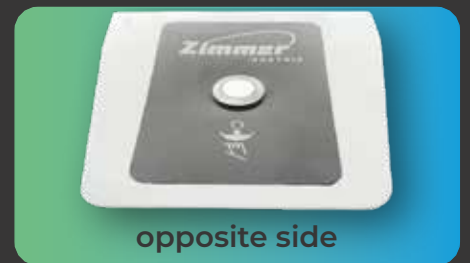


7 | Operating panel and repeat navigator on each printing station to ensure easy handling and quick adjustment of:

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



operator side



opposite side



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.



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.



Please see separate leaflet / **THERMOCURE high capacity hot air dryer**



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.

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, ...



COLOUR APPLICATION SYSTEM

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:

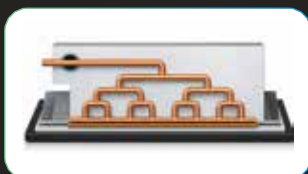


RG-SI-ST-ECO ROLL SQUEEGEE

Standard colour pipe with magnetic holding ledge for any roll rod diameter from 8 to 30 mm



RG-S2-BV ROLL SQUEEGEE



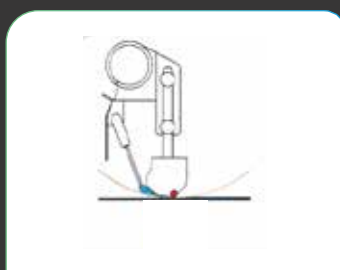
The **ZIMMER AUSTRIA BVS micro channel system** for more precise paste distribution

optional for all standard colour pipes



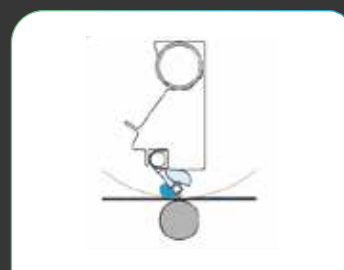
VARIOCOLOR MAGNET BLADE SQUEEGEE

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

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.



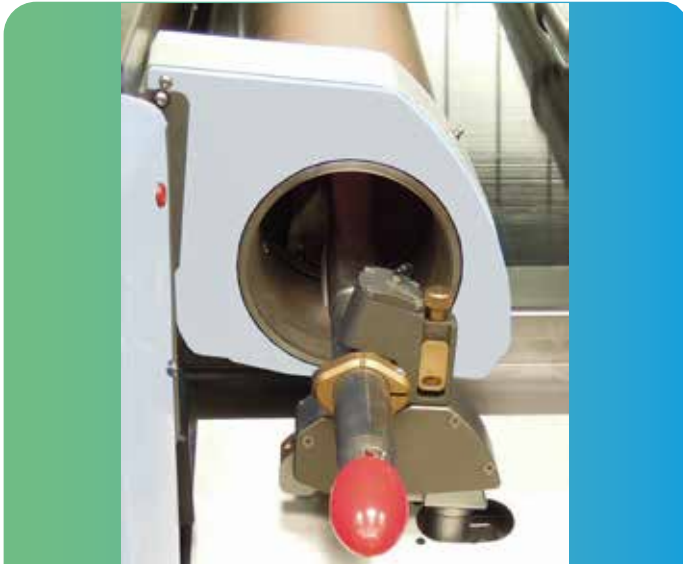
RH-ECO-U (fast & safe)

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

HIGH EFFICIENT & ECO-FRIENDLY

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



STANDARD pumps



SUBFLOOR pumps

PUMPS

High quality results with all kinds of colour paste viscosity.

Stainless steel pumps in various executions:

● STANDARD PUMPS

● SUBFLOOR 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-CI 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

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 bearingsystem, 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 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-, endring glueing-, screen coating machines, ...



*Please see separate leaflet / **THERMOCURE** high capacity hot air dryer*

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 **screenprinting** 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.



ROTASCREEN

TECHNICAL DATA

FABRIC TYPES	Woven, knitted and nonwoven fabrics
WORKING WIDTH	165 / 185 / 220 / 240 / 285 / 320 / 330 cm
NUMBER OF PRINTING STATIONS	Up to 24
REPEAT SIZE ADJUSTMENT	From 64 cm to 102 cm
PRINT HEAD	ROTASCREEN TG Closed bearing printing head ROTASCREEN TU Open bearing printing head
PRINTING SPEED	Up to 120 meters per minute
COLOUR PIPES	Kombiroll magnet roll squeegee; Variocolor magnet roll squeegee; Variocolor magnet blade squeegee; Mechanic blade squeegee;
DRYER	Various dryer layouts for all kinds of fabrics

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



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