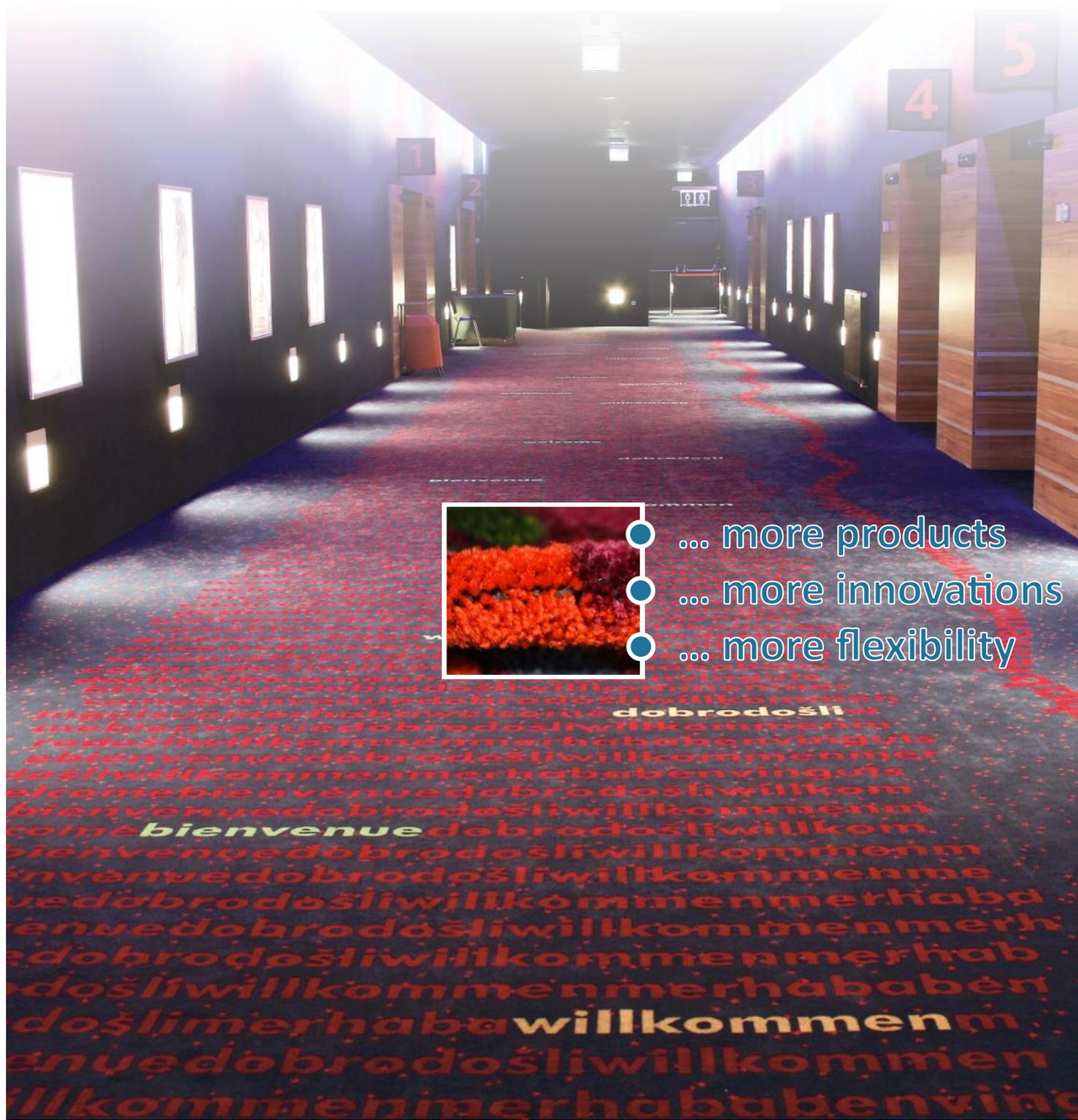# CHROMOJET.DIGITAL PRINTING
SPOT COLOR **25** DPI

... more products
... more innovations
... more flexibility

CHROMOJET⁴⁰⁰.BASICS

GENERAL

Printed carpets, rugs and mats out of polyamide and wool are popular throughout the world.

FUNCTION

CHROMOJET is a printing system using high speed valves which are computer controlled. The pre-mixed pressurized spot colors are injected with high precision deep into the face of the pile without any machine parts touching the fabric. Deepest color penetration and excellent print definition are the result.

PRINTING.SPEED

Production speed is almost proportional to the number of jets used per color. More jets offer higher production speed.
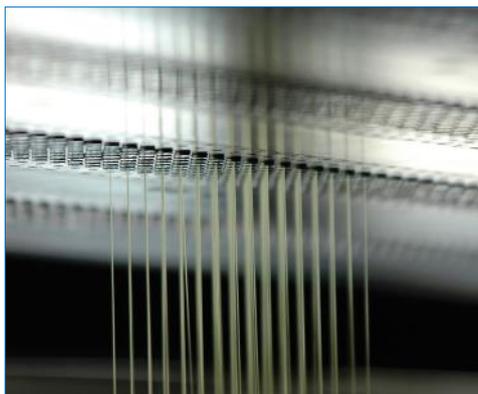
MODES OF OPERATION

Single Speed Mode (SSM)

Each group of jets is used for one individual color.

Double Speed Mode (DSM)

Two groups of jets are combined and filled with the same color. The linear production speed is almost doubled in comparison to single speed mode.

Selector | CHROMOJET^{400} printer with 25.4 dpi resolution

Production per year at 2 shift operation (16 h)	Piece by Piece operation		Roll to Roll operation		
	Mats	Carpet tiles	2 m print lines	4 m print lines	5 m print lines
0 - 25,000	CHR^{400} 2000 16 c x 8 jets				
25,000 - 50,000	CHR^{400} 2500 16/32 c x 16 jets	CHR^{400} 2000 8/12/16 c x 32 jets			
50,000 - 100,000	CHR^{400} 2500 32/48 c x 48 jets	CHR^{400} 2000 8/12/16 c x 64 jets	CHR^{400} 2000 8/12/16 c x 32 jets		
100,000 - 250,000		CHR^{400} 2000 8/12/16 c x 128 jets	CHR^{400} 2000 8/12/16 c x 64 jets		
250,000 - 500,000			CHR^{400} 2000 8/12/16 c x 128 jets	CHR^{400} 4000 8/12/16 c x 128 jets	
0.5 - 1 mio m²				CHR^{400} 4000 8/12/16 c x 256 jets	
1 - 2.5 mio m²				CHR^{400} 4000 8/12/16 c x 512 jets	CHR^{400} 5000 8/12/16 c x 512 jets
2.5 - 5 mio m²				CHR^{400} 4000 8/12/16 c x 1280 jets	CHR^{400} 5000 8/12/16 c x 1280 jets

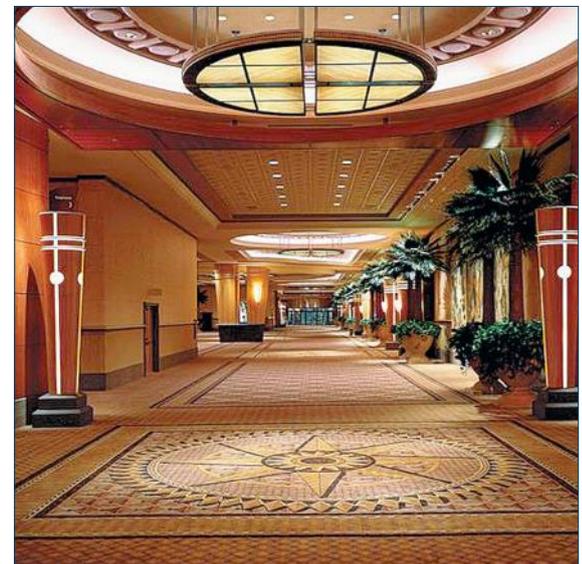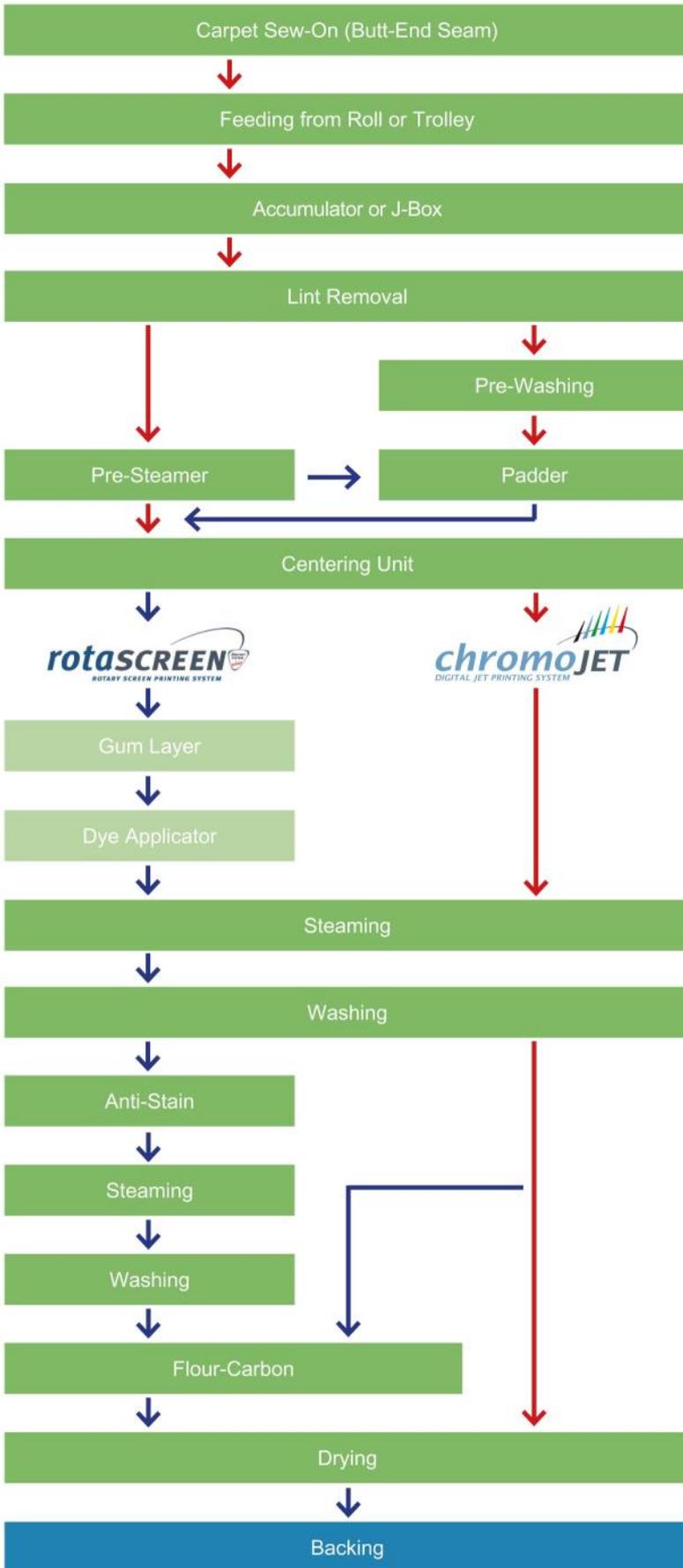Besides our standard program we also build highly customized printing lines in various configurations.

ADVANTAGES OF CHROMOJET^{400}

- No screens – no limitation in pattern repeats
- Design change „on the fly"
- Full penetration
- Pile weight from 250 up to 1,500 g/m²
- For polyamide, wool, acrylic and (up to a certain extent) polyester yarns
- Complete print line from one supplier
- High resolution

Workflow of a Carpet Printline

Carpet Sew-On (Butt-End Seam)

↓

Feeding from Roll or Trolley

↓

Accumulator or J-Box

↓

Lint Removal

↓

Pre-Washing

↓

Pre-Steamer → Padder

↓

Centering Unit

↓

rotaSCREEN — ROTARY SCREEN PRINTING SYSTEM

chromoJET — DIGITAL JET PRINTING SYSTEM

Gum Layer

↓

Dye Applicator

↓

Steaming

↓

Washing

↓

Anti-Stain

↓

Steaming

↓

Washing

↓

Flour-Carbon

↓

Drying

↓

Backing

CHROMOJET - DIGITAL PRINTING SPOT COLOR 25 DPI (ENG)

CHROMOJET^{400} Printer for rugs & wall to wall carpets

Specification	CHR^{400} 4000 c x 128	CHR^{400} 4000	CHR^{400} 4000	CHR^{400} 4000
Print width	415 cm	415 cm	415 cm	415 cm
Number of colors	8/12/16 c	8/12/16 c	8/12/16 c	8/12 c
Jets per color	128	256	512	1,280
Linear print speed at 25.4 dpi	0.7 - 0.9 m/min	1.5 - 1.9 m/min	2.7 - 3.4 m/min	6.3 - 7.6 m/min
Linear print speed at 25.4 dpi in double speed mode	1.4 - 1.8 m/min	3.0 - 3.8 m/min	5.4 - 6.8 m/min	10.3 - 12.4 m/min
Required space	~ 15 x 50 m	~ 15 x 60 m	~ 15 x 70 m	~ 15 x 100 m

CHROMOJET printed rugs and carpets for the contract and hospitality markets are very popular.
High flexibility in colors and no restriction in pattern repeats are the major advantages over woven and tufted carpets.
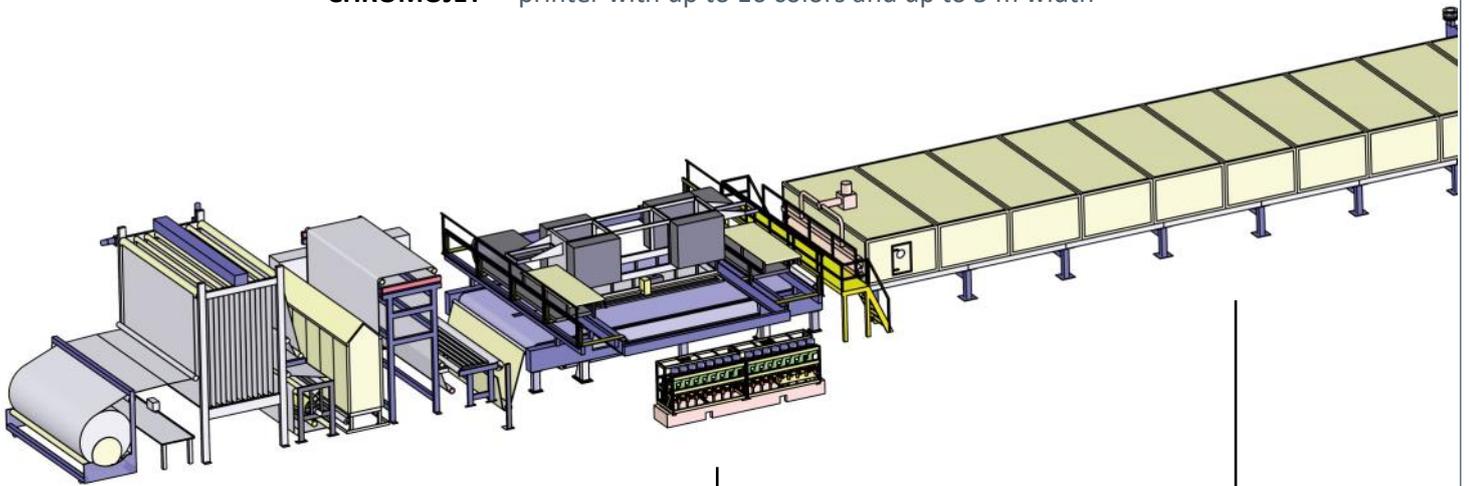
No dyed yarn needs to be kept on stock – only white yarn or white tufted carpet.

CHROMOJET - DIGITAL PRINTING SPOT COLOR 25 DPI (ENG)

CHROMOJET^{400} printer with up to 16 colors and up to 5 m width

Unrolling, J-box, lint removal, pre-steamer, edge guiding and pull roller

Color kitchen with automatic thickener and water dosing

Horizontal steamer, washing unit and dryer

CHROMOJET - DIGITAL PRINTING SPOT COLOR 25 DPI (ENG)

CHROMOJET⁴⁰⁰ 4 m print lines for rugs & wall to wall carpets
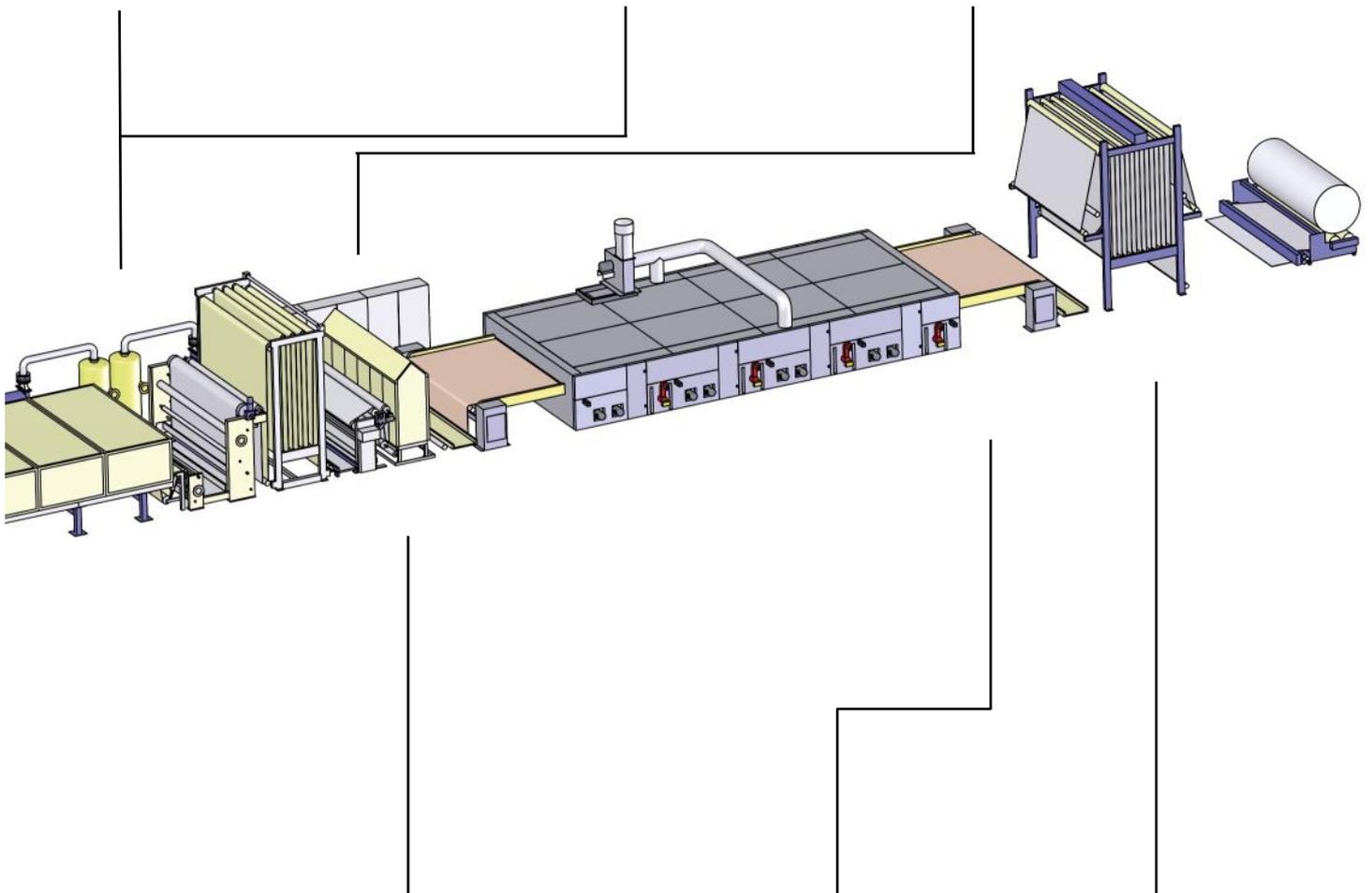

Washing and vacuum unit

Vacuum pumps of washing unit

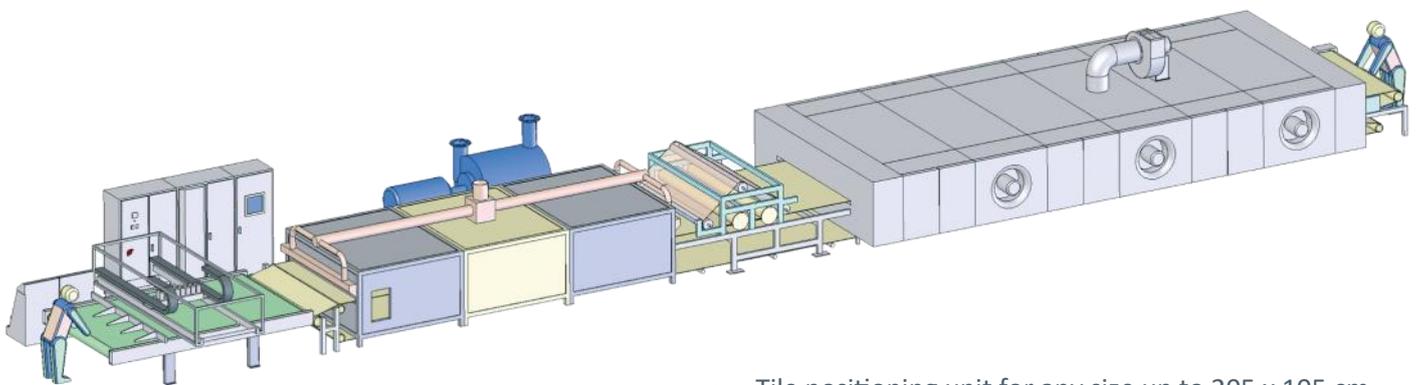Foam application and impregnation

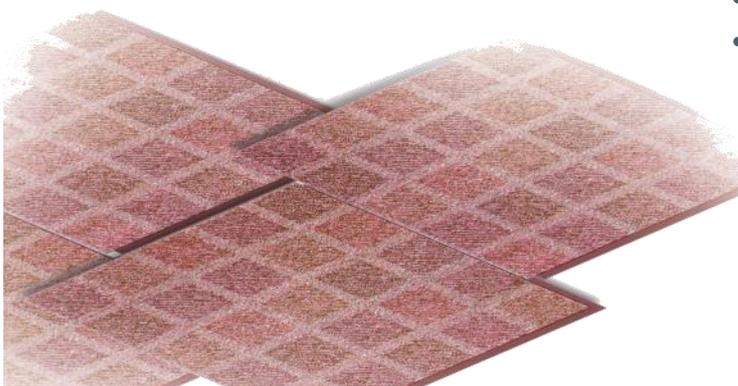Stenter inlet to dryer

Exit of dryer with cooling zone

Accumulator, inspection zone, roll-up unit

CHROMOJET - DIGITAL PRINTING SPOT COLOR 25 DPI (ENG)

- Tile positioning unit for any size up to 205 x 105 cm
- High resolution **CHROMOJET.**PRINTER
- Conveyor belt throughout the complete line
- Special steamer construction with steam from top to avoid overheating of the backing
- Sandwich washer with high power vacuum pump
- Low temperature dryer with long drying time

CHROMOJET - DIGITAL PRINTING SPOT COLOR 25 DPI (ENG)

CHROMOJET^{400} Printer for carpet tiles, mats & runners

Specification	CHR^{400} 2000 c x 32	CHR^{400} 2000 c x 64	CHR^{400} 2000 c x 128
Print width	2,100 mm	2,100 mm	2,100 mm
Number of colors	8/12/16 c	8/12/16 c	8/12/16 c
Jets per color	32	64	128
Linear print speed at 25.4 dpi in single speed mode	0.3 - 0.4 m/min	0.7 - 0.8 m/min	1.2 - 1.4 m/min
Linear print speed at 25.4 dpi in double speed mode	0.6 - 0.8 m/min	1.4 - 1.6 m/min	2.4 - 2.8 m/min
Tiles per hour (50 x 50 cm)	~ 40 x 45 m²/h	~ 75 x 90 m²/h	~ 120 x 145 m²/h

CARPET.TILE PRINTING

CHROMOJET is perfect to print carpet tiles either on individual tiles or on slabs where tiles will be cut out after the printing process.

Printing can be done either on pre-dyed tiles with a light base color or on white tiles.

Unrolling unit with integrated pre-steamer, edge guiding and pull roller

Carpet tile positioning device for a precise match of the print

Positioned tiles during the printing process

Sandwich washer for mats and carpet tiles

Bath mat printing (2 m line)

CHROMOJET - DIGITAL PRINTING SPOT COLOR 25 DPI (ENG)

At the Cap'Cinéma Le Carnot various playful colors show the way to the cinema halls
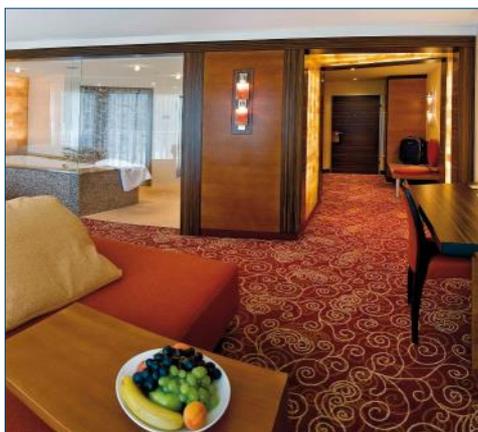whose numbers are also integrated into the design.

Applications

25 dpi Carpets by Halbmond Teppichwerke GmbH, Oelsnitz

Hotel Royal in Eurothermen-Ressort Bad Ischl

CHROMOJET Exceeds All Expectations!

CHROMOJET allows sharp, colorful and brilliant carpet designs.

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All machines and components from **ZIMMER AUSTRIA** are strictly inspected and tested before shipping to customers to ensure efficient installation and best performance with 100% satisfaction.

CHROMOJET on-site customer support is guaranteed by service partners and **ZIMMER AUSTRIA** engineers and technologists.

This setup guarantees a short response time on a service call from a customer.

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