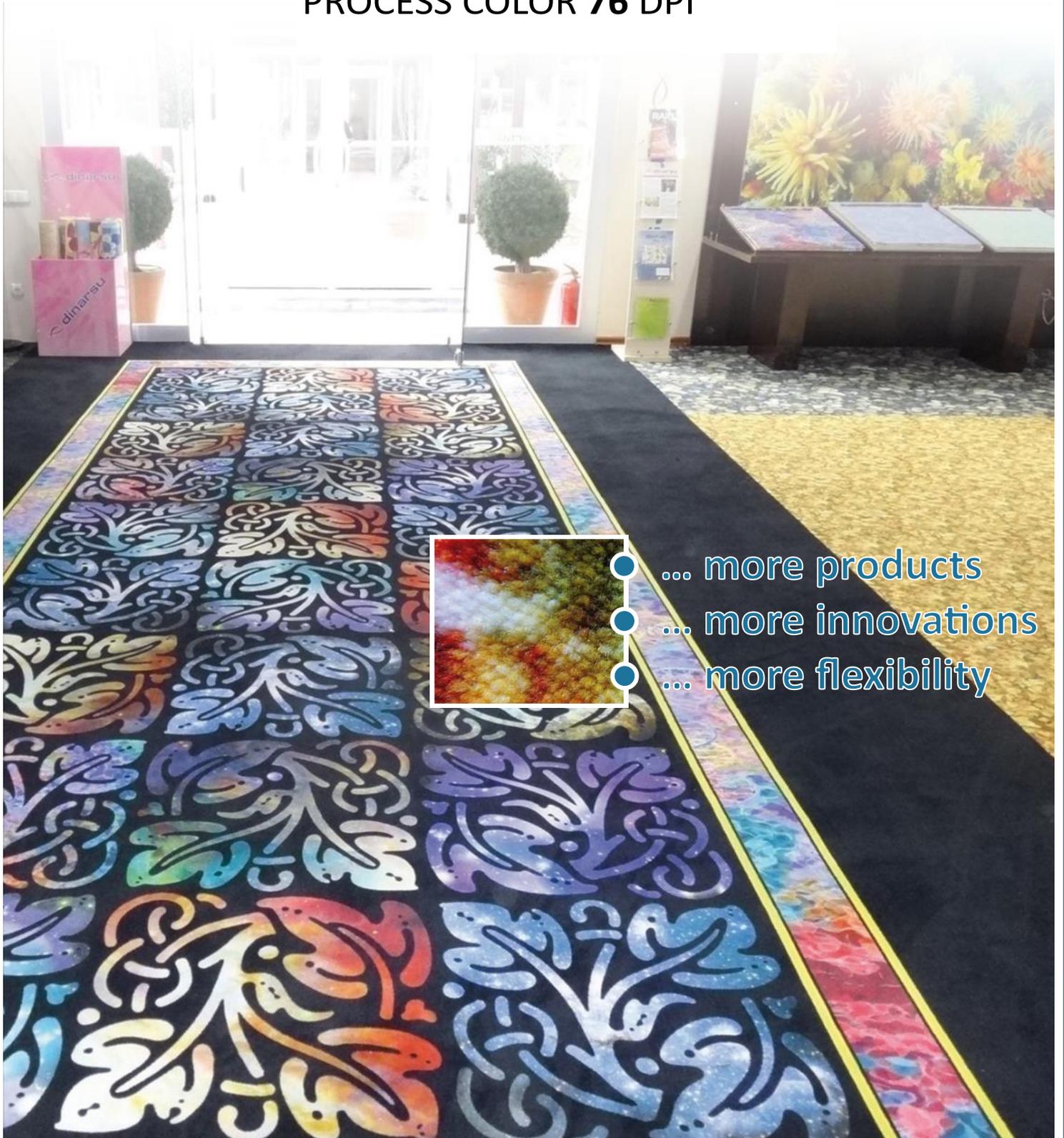




CHROMOJET.DIGITAL PRINTING

PROCESS COLOR 76 DPI

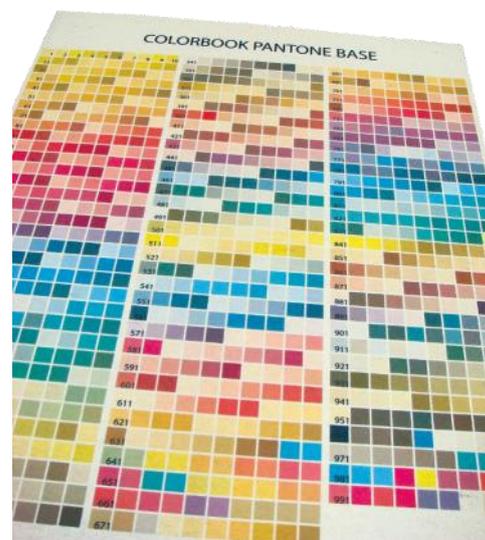


- ... more products
- ... more innovations
- ... more flexibility

CHROMOJET⁸⁰⁰.BASICS

In process color printing a set of 8 to 16 basic color shades is used to generate all color shades on the carpet using small dots (just as in an office printer). The more base colors are used - the wider and smoother the color range gets. This method has a lot of advantages against spot color printing, where each color must be pre-mixed in advance.

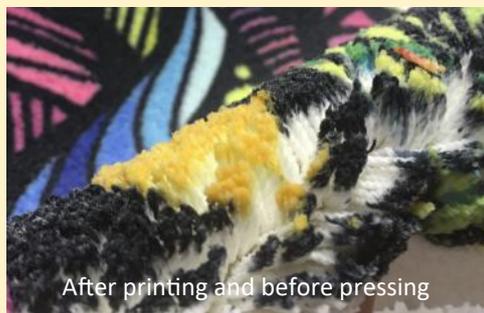
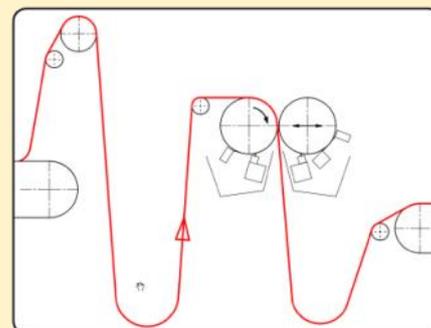
- Easy sampling
- Even orders for one piece can be realized
- Unlimited design variety
- Unlimited colors per design
- No change of color - always run with same dyes (environmentally friendly)
- 800-type Jets can be repaired by customer



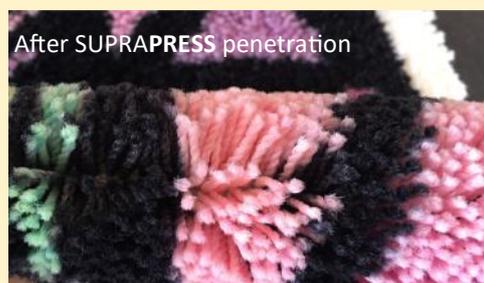
SUPRAPRESS.PENETRATION SYSTEM

This penetration station is placed behind the printer and enhances penetration dramatically at minimum paste pick-up. The carpet is squeezed in between 2 driven rollers which press the dye or ink from the top of the pile deep into the pile.

- Amount of pick-up can be reduced by about 80% in comparison to “normal” **CHROMOJET** printing - saves thickener, chemicals and energy
- Full penetration also on high pile products
- No frosting - undyed fibers are dipped into the dye
- No smearing or ghost printing - rollers are washed and dried continuously
- Available for **CHROMOJET** as well as for **COLARIS**
- In case of Polyester printing a minimized pick-up is mandatory



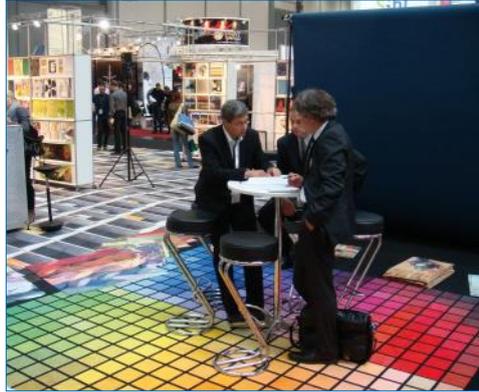
After printing and before pressing



After SUPRAPRESS penetration



Pull roller and spreading roller of SUPRAPRESS installed on a **CHROMOJET** polyester blanket print line



PROCESS COLOR.CARPET PRINTING

CREATIVITY WITHOUT LIMITS

Selector | CHROMOJET⁸⁰⁰ printer with 50/76 dpi resolution

Production (in sqm) per year at 2 shift operation (16 h)	Mats	Carpet tiles	2 m print lines tiles and roll-to-roll	4 m print lines for roll-to-roll	5 m print lines for roll-to-roll
25,000 - 50,000 m ²	CHR ⁸⁰⁰ 2000 12/16 c x 32 jets				
100,000 - 250,000 m ²	CHR ⁸⁰⁰ 2000 12/16 c x 128 jets	CHR ⁸⁰⁰ 2000 12/16 c x 128 jets	CHR ⁸⁰⁰ 2000 12/16 c x 128 jets		
250,000 - 500,000 m ²	CHR ⁸⁰⁰ 2000 12/16 c x 256 jets	CHR ⁸⁰⁰ 2000 12/16 c x 256 jets	CHR ⁸⁰⁰ 2000 12/16 c x 256 jets		
1 - 2 mio. m ²			CHR ⁸⁰⁰ 2000 12/16c x 512 jets	CHR ⁸⁰⁰ 4000 12/16c x 512 jets	CHR ⁸⁰⁰ 5000 12/16c x 512 jets
2 - 5 mio m ²				CHR ⁸⁰⁰ 4000 12c x 1024 jets	CHR ⁸⁰⁰ 5000 12c x 1024 jets



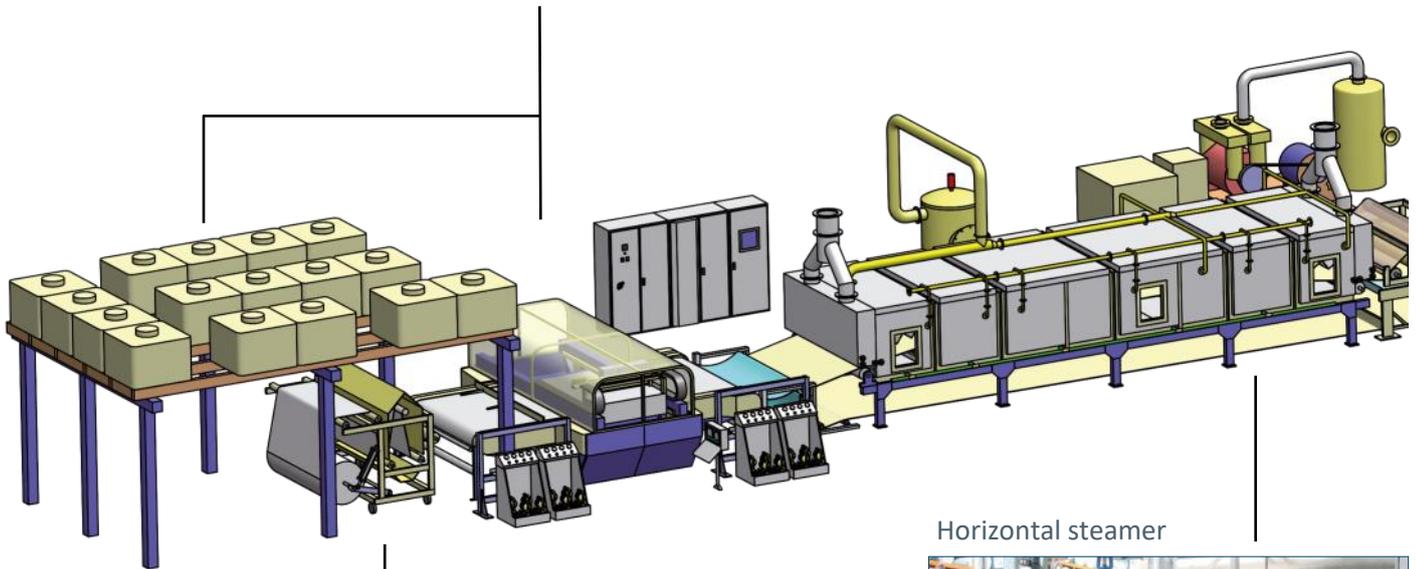
ADVANTAGES OF CHROMOJET⁸⁰⁰

- Maximum efficiency in short runs
- No screens necessary - no limitation in repeats
- Just in time delivery - lower cost for stock goods
- Design change "on the fly"
- Low paste cost due to standard commercially available dyestuff
- For polyamide, wool, acrylic and polyester
- Pile weight from 200 up to 1,500 g/m²
- Brilliant shades with best fastness
- No fabric pre-treatment needed
- Full penetration
- Less waste water

CHROMOJET - DIGITAL PRINTING PROCESS COLOR 76DPI (ENG)



CHROMOJET⁸⁰⁰ 2000, with 12 colors / 256 jets per color and color supply tanks



Entry unit

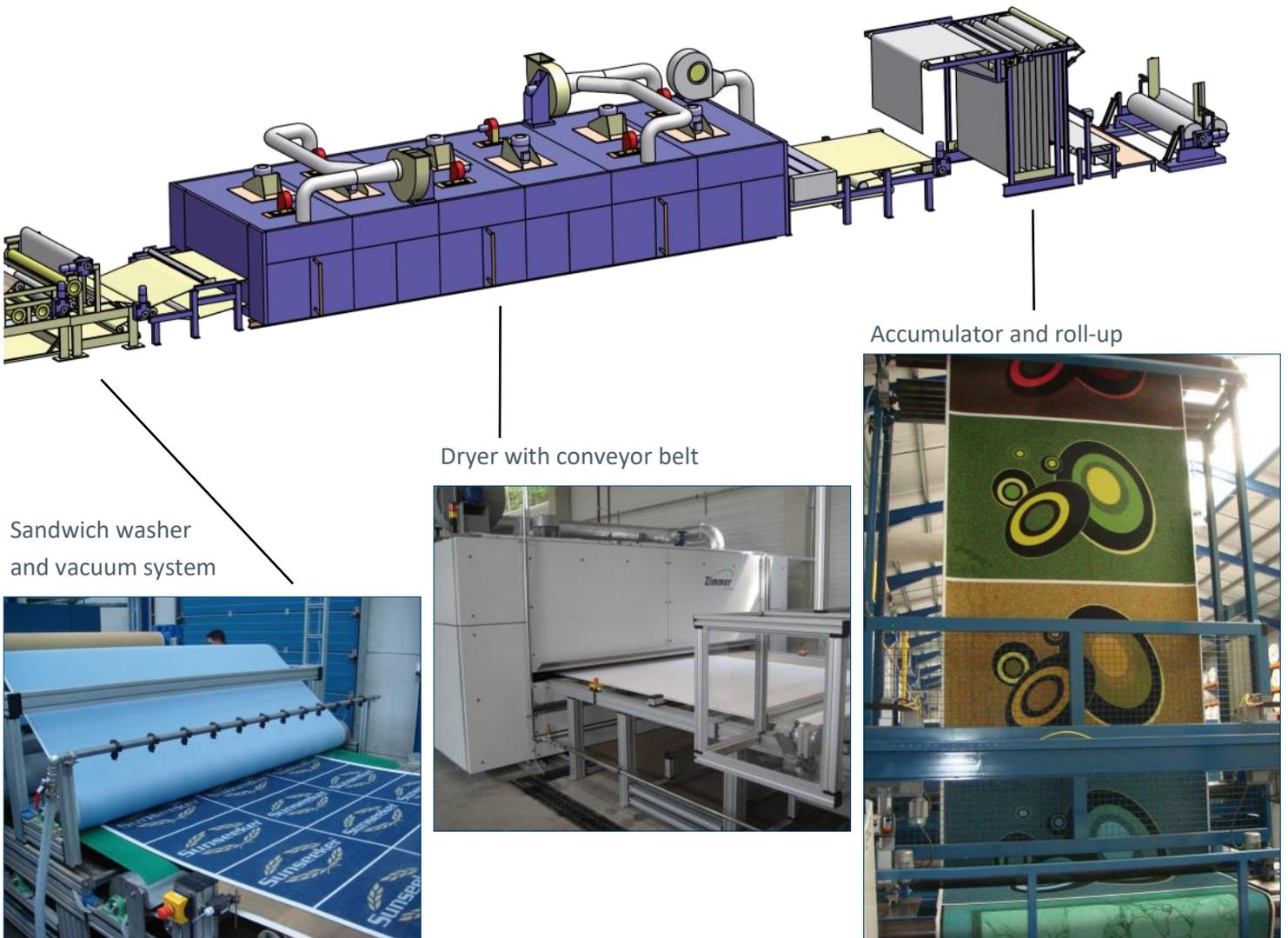
Horizontal steamer



PRINTER

FOR MATS, CARPETS TILES, RUGS AND WALL-TO-WALL CARPETS

Specification	CHR ⁸⁰⁰ 2000	CHR ⁸⁰⁰ 2000	CHR ⁸⁰⁰ 2000	CHR ⁸⁰⁰ 4000	CHR ⁸⁰⁰ 4000
Print width	2,200 mm	2,200 mm	2,200 mm	4,200 mm	4,200 mm
Number of colors	16 c	12/16 c	12/16 c	12/16 c	12 c
Jets per color	64	128	256	512	1,024
Linear print speed at 76 * 38 dpi (only in combination with SupraPRESS)	N/A	0.9 - 1.2 m/min	1.7 - 2.2 m/min	1.8 - 2.5 m/min	3.6 - 4.8 m/min
Linear print speed at 76 * 50 dpi	0.3 - 0.5 m/min	0.6 - 0.9 m/min	1.2 - 1.7 m/min	1.5 - 2.1 m/min	3.3 - 4.0 m/min
Linear print speed at 76 * 76 dpi	0.2 - 0.3 m/min	0.4 - 0.6 m/min	0.8 - 1.2 m/min	1.0 - 1.4 m/min	2.0 - 2.8 m/min
Tiles per hour (50 x 50 cm) at 50 dpi	N/A	~ 40 - 50 m ² /h	~ 70 - 80 m ² /h	N/A	N/A



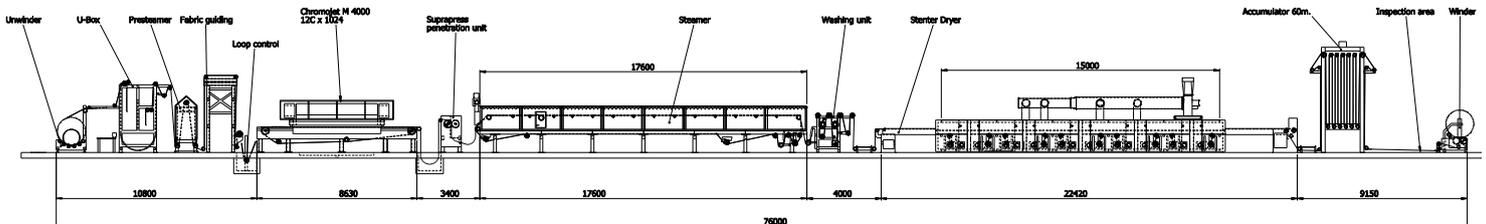
Sandwich washer and vacuum system

Dryer with conveyor belt

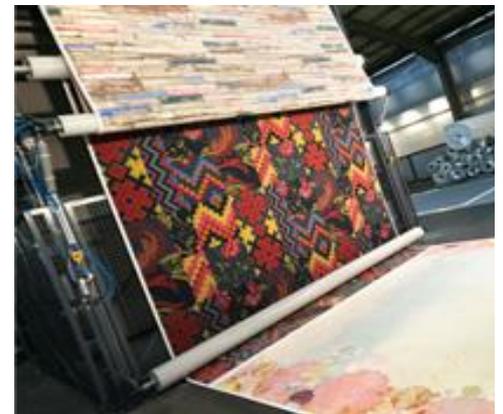
Accumulator and roll-up

POLYAMIDE AND POLYESTER.PRINTING

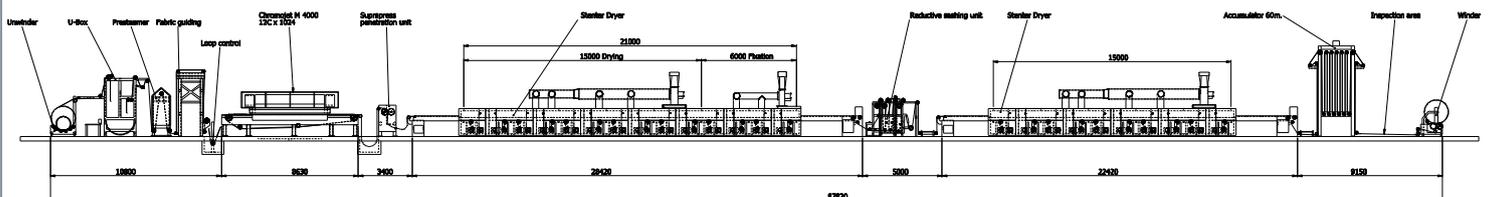
CHROMOJET.PRINTING ON CARPETS OUT OF POLYAMIDE, WOOL, CATIONIC



- Carpet preparation with unrolling, pre-steaming or pre-washing, guiding
- **CHROMOJET** printing
- **SUPRAPRESS** penetration
- Steaming for about 3 - 8 minutes
- Washing and vacuum extraction
- Drying (double impingement dryer or flow through dryer)
- Accumulator, roll up



CHROMOJET.PRINTING ON POLYESTER CARPETS TUFTED ON NONWOVEN POLYESTER PRIMARY BACKING



- Carpet preparation with unrolling, pre-steaming or pre-washing, guiding
- **CHROMOJET.PRINTING** with minimum pick-up
- **SUPRAPRESS** penetration
- Stenter drying at 130°C followed by heat fixation for about 2 minutes at 180°C
- Reductive washing and vacuum extraction
- Drying (double impingement dryer or flow through dryer)
- Accumulator, roll up



PROCESS.COLOR PRINT LINES - 2,200 MM WIDE



Unrolling, accumulator,
lint removal, centring unit



Carpet tile print line at Godfrey Hirst, Australia:
2,200 mm wide; 16 colors; 256 jets per color



Horizontal steamer with conveyor belt



Sandwich washer and vacuum unit



SUPRAFOAM applicator



Exit of dryer



CHROMOJET.PRINTER with 16 colors and 256 jets per color

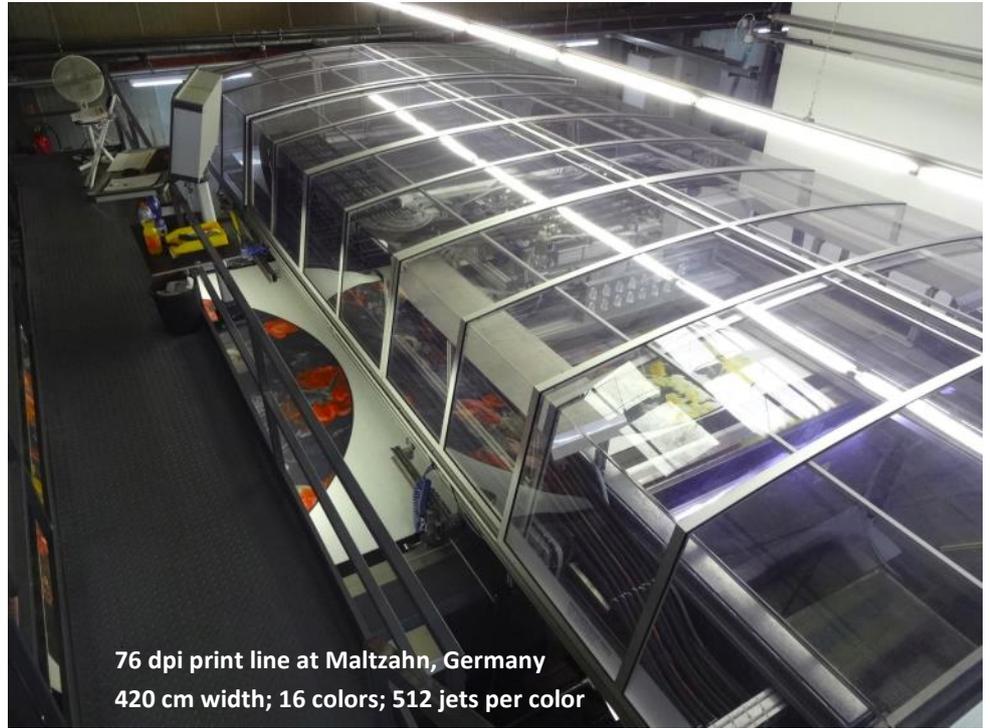


CHROMOJET.PRINTER with 16 colors and 256 jets per color

PROCESS.COLOR PRINT LINES - 4,200 MM WIDE



Unrolling, accumulator, pre-steaming, pre-washing, center guiding



76 dpi print line at Maltzahn, Germany
420 cm width; 16 colors; 512 jets per color



Steamer followed by washer and accumulator



Washing and vacuum unit



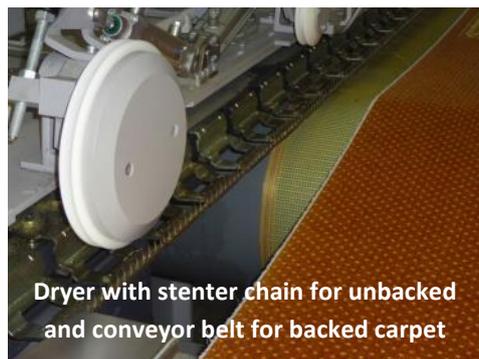
Accumulator before roll-up unit



Reverse Osmosis water preparation



Center guiding followed by stenter dryer

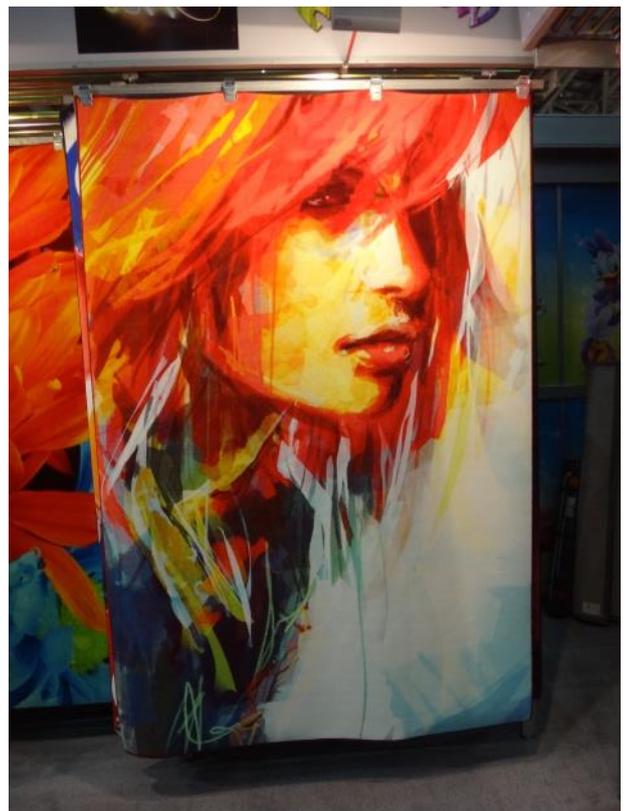


Dryer with stenter chain for unbacked and conveyor belt for backed carpet



Roll-up unit with foil dispenser

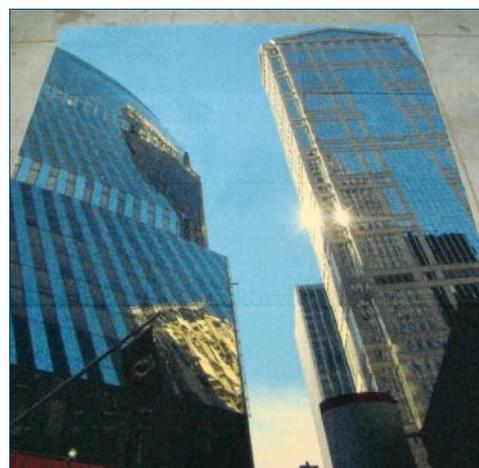
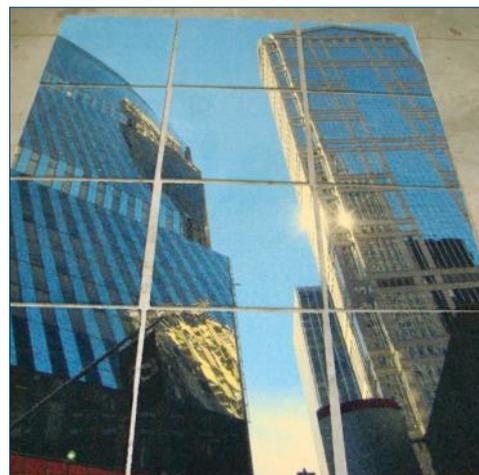
TUFTED AND WOVEN.RUG PRINTING



PRINTING OF CARPET.TILES



Printing of a 2 x 1.5 m repeat on individual oversized tiles.



RUGS AND MAT.PRINTING



Individual rugs and mats printed on demand. Each rug has a different design and it's own color combination.



BESIDE THESE TYPICAL APPLICATIONS THERE ARE A LOT OF OTHER POSSIBILITIES

- Game and play carpets for floor and tables
- Seat covers
- Car carpets and mats
- Club rugs and mats
- Exhibition and event carpets



ZIMMER AUSTRIA offers customer oriented developments and applications using inkjet and valve jet digital printing and digital functionalization technologies.



FIRST IN QUALITY | FIRST IN SERVICE

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.

INNOVATION

QUALITY

SERVICE

Zimmer Maschinenbau GmbH
DIGITAL PRINTING SYSTEMS
Eibergstrasse 2-8
6330 Kufstein | AUSTRIA

Phone +43 (5372) 648 93 - 0
info@zimmer-austria.com

J. ZIMMER Maschinenbau GmbH, Kufstein reserves the right of technical and design modification of the equipment described within this brochure at any time without prior notice. This leaflet is for informative purpose only.