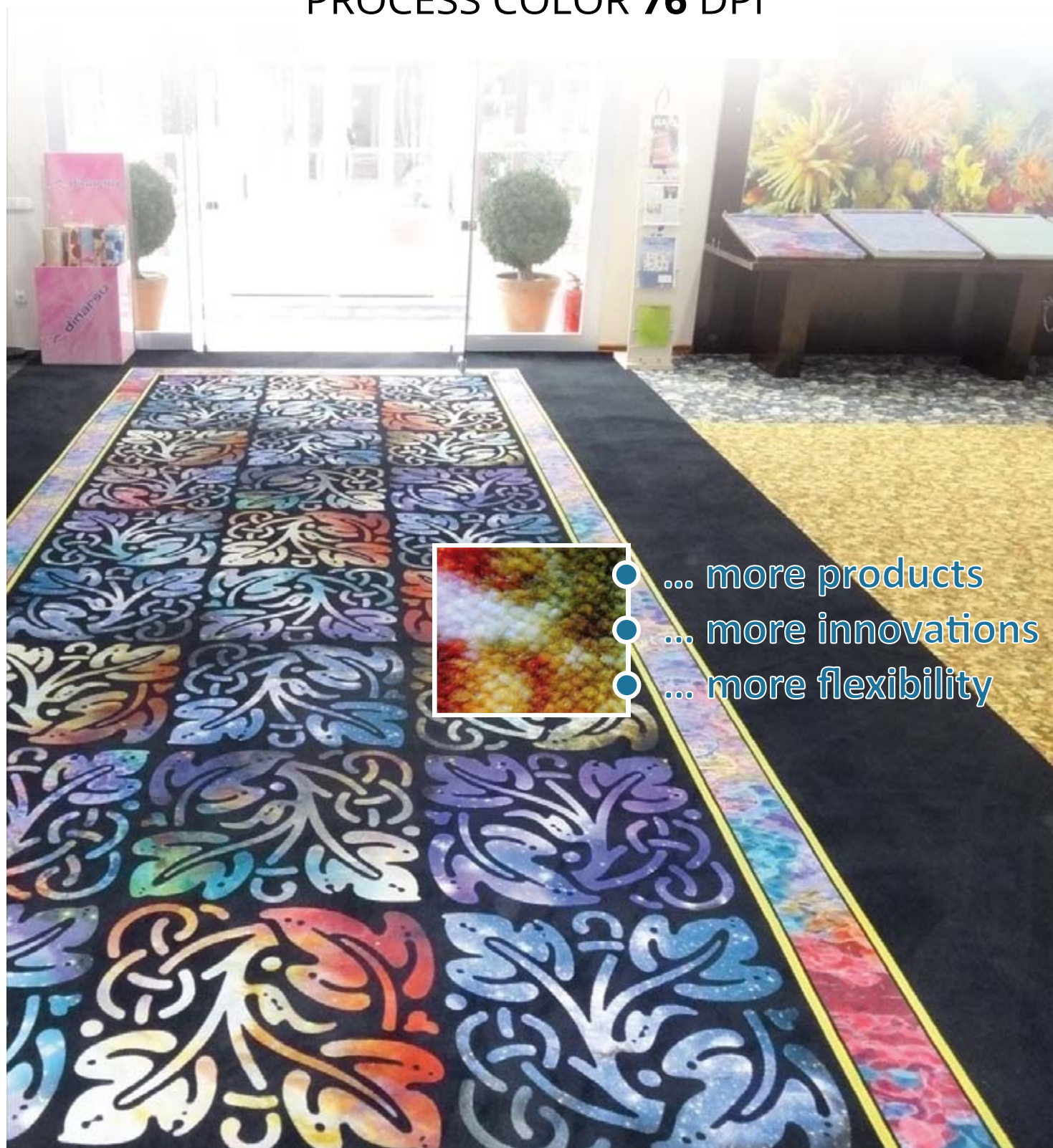




# CHROMOJET.DIGITAL PRINTING

## PROCESS COLOR 76 DPI



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



# CHROMOJET<sup>800</sup>.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.

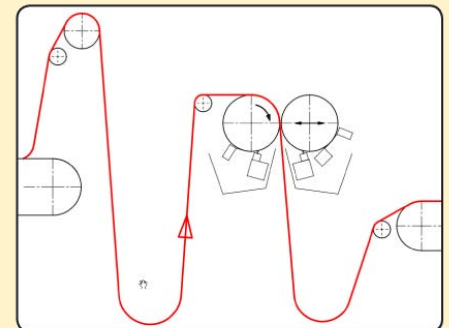
- Easy sampling
- Even orders for one piece can be realized
- Unlimited design variety
- Unlimited colors per design
- No change of color - always run with same dyes (environmentally friendly)
- 800-type Jets can be repaired by customer



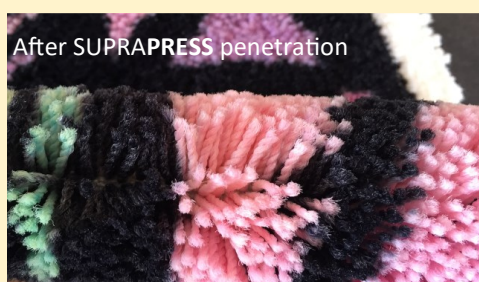
## SUPRAPRESS.PENETRATION SYSTEM

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



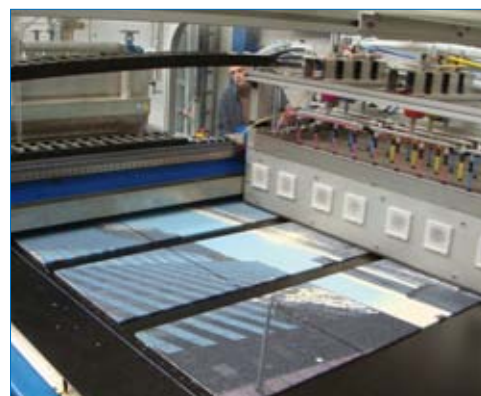
After printing and before pressing



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 | CHROMOJET<sup>800</sup> printer with 50/76 dpi resolution

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



#### ADVANTAGES OF CHROMOJET<sup>800</sup>

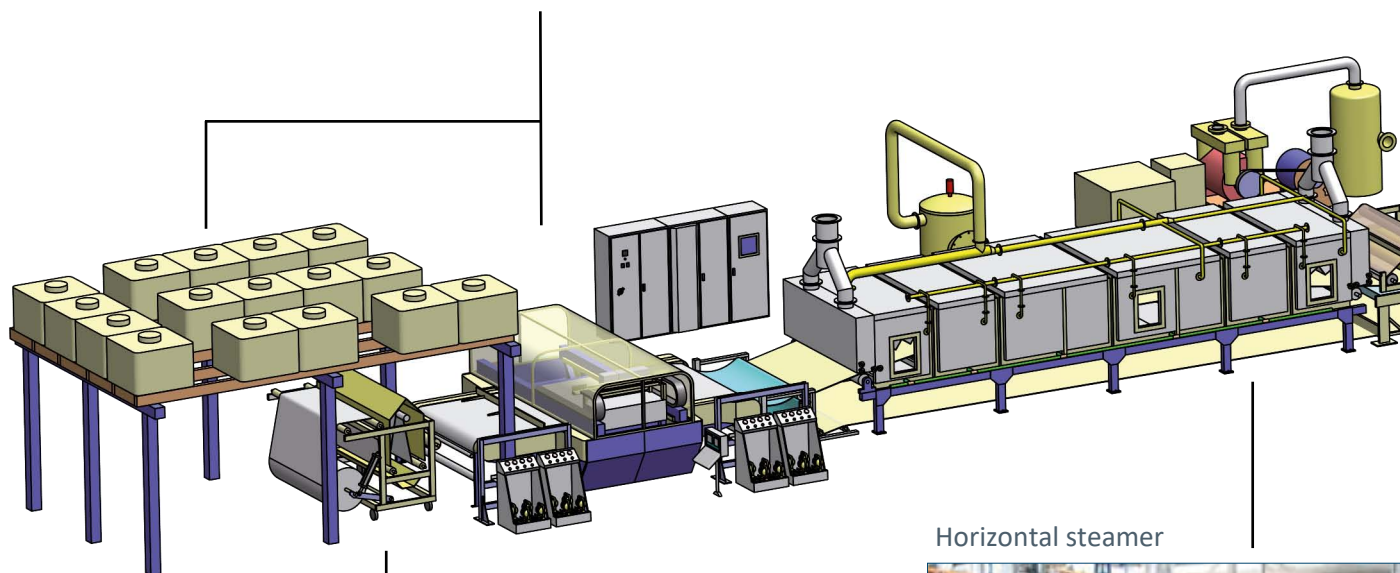
- Maximum efficiency in short runs
- No screens necessary - no limitation in repeats
- Just in time delivery - lower cost for stock goods
- Design change "on the fly"
- Low paste cost due to standard commercially available dyestuff
- For polyamide, wool, acrylic and polyester
- Pile weight from 200 up to 1,500 g/m<sup>2</sup>
- Brilliant shades with best fastness
- No fabric pre-treatment needed
- Full penetration
- Less waste water
- Complete print line from one supplier



CHROMOJET - DIGITAL PRINTING PROCESS COLOR 76DPI (ENG)



**CHROMOJET<sup>800</sup>** 2000, with 12 colors / 256 jets per color and color supply tanks



Entry unit

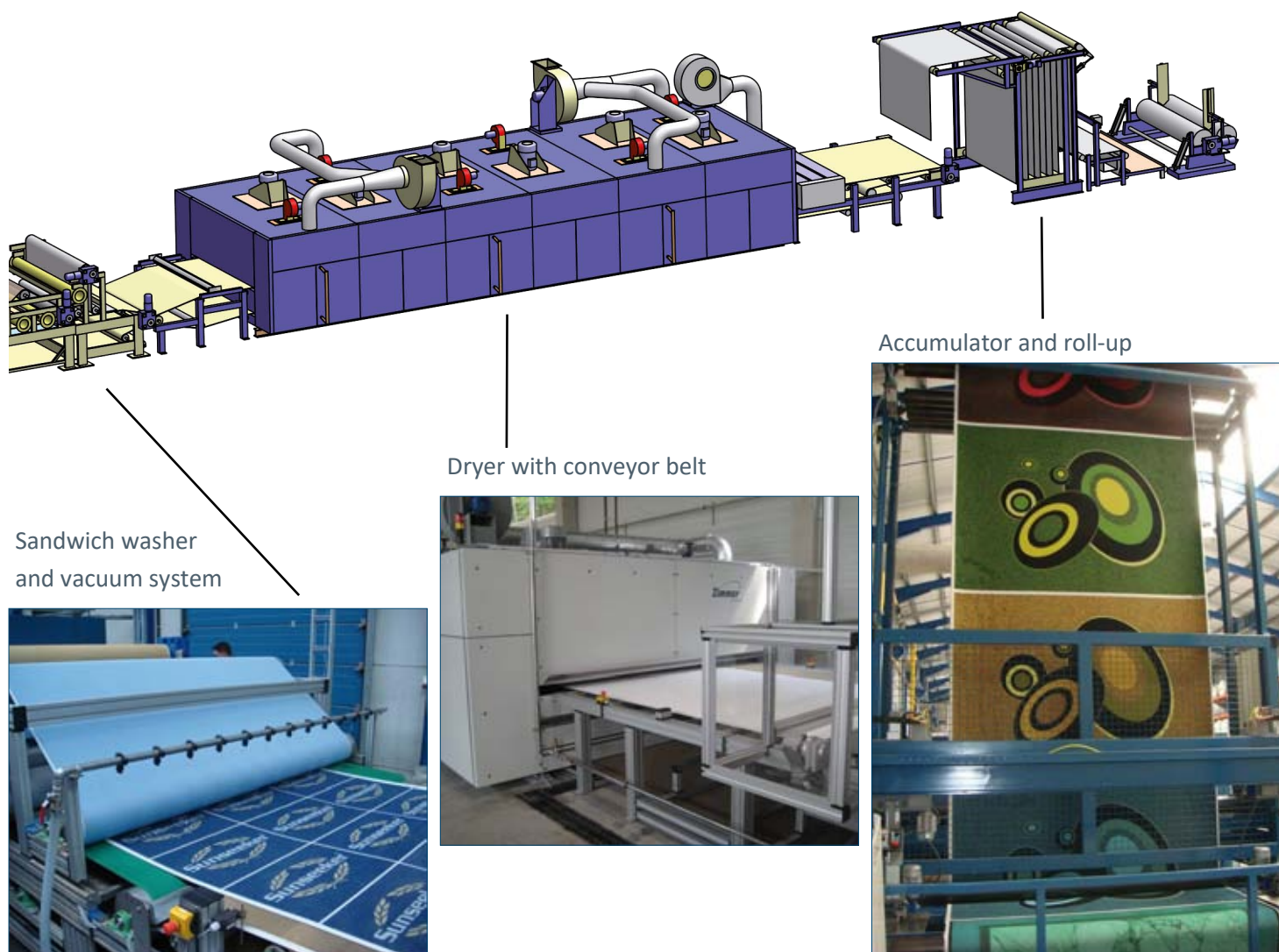
Horizontal steamer



## PRINTER

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

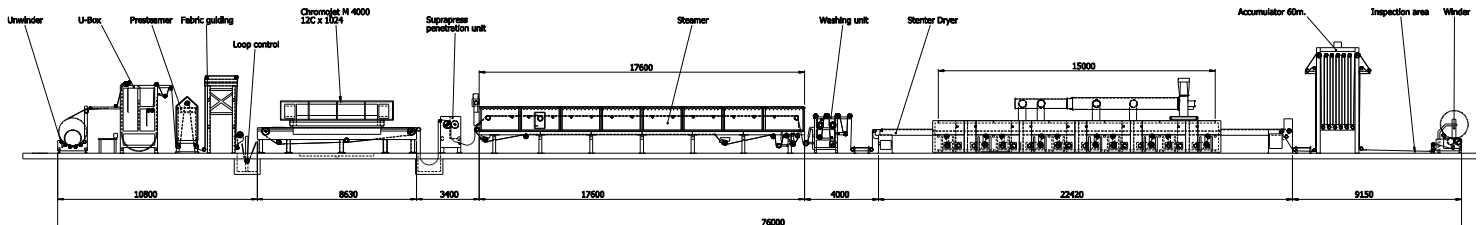
| Specification  | CHR <sup>800</sup> 2000 | CHR <sup>800</sup> 2000     | CHR <sup>800</sup> 2000     | CHR <sup>800</sup> 4000 | CHR <sup>800</sup> 4000 |
|--|-------------------------|-----------------------------|-----------------------------|-------------------------|-------------------------|
| 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<br>(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 <sup>2</sup> /h | ~ 70 - 80 m <sup>2</sup> /h | N/A                     | N/A                     |



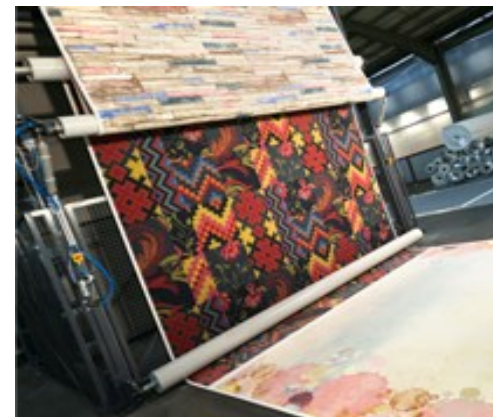


# POLYAMIDE AND POLYESTER.PRINTING

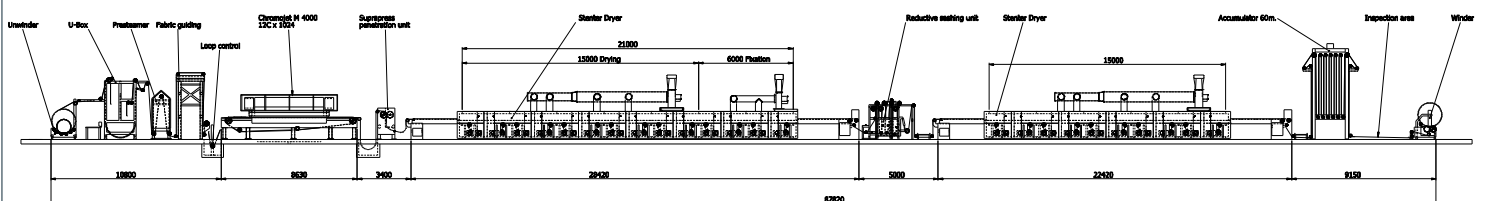
## CHROMOJET.PRINTING ON CARPETS OUT OF POLYAMIDE, WOOL, CATIONIC DYEABLE POLYESTER AND ACRYLIC



- 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



Horizontal steamer with conveyor belt



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



Sandwich washer and vacuum unit



SUPRAFOAM applicator



Exit of dryer



CHROMOJET.PRINTER with 16 colors and 256 jets per color



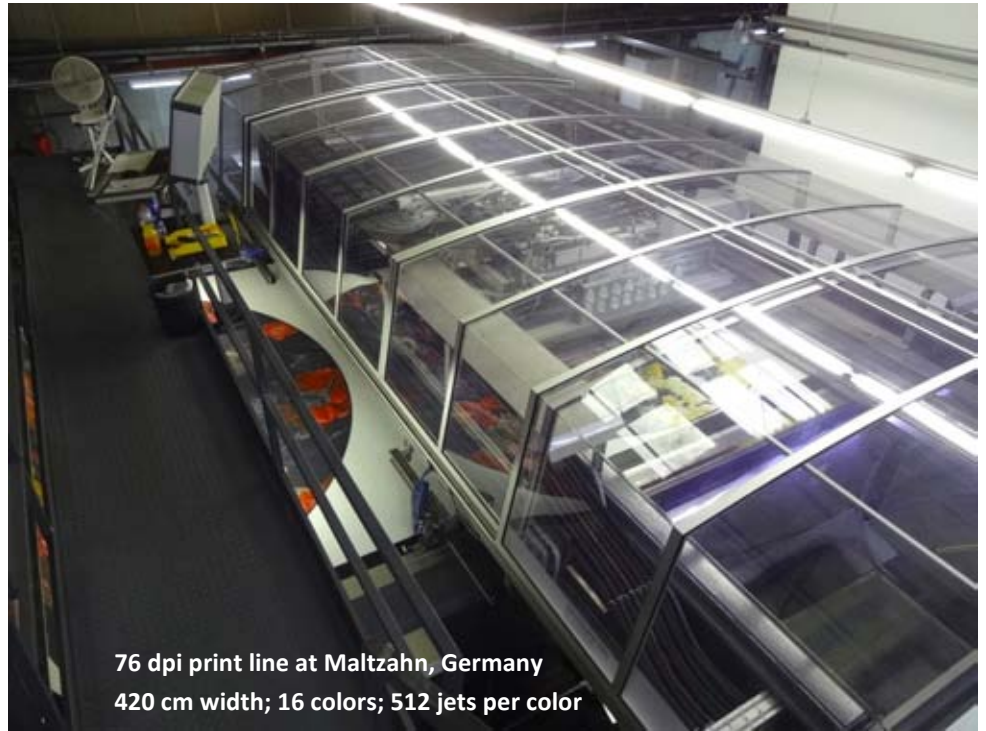
# PROCESS.COLOR PRINT LINES - 4,200 MM WIDE



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



Steamer followed by washer  
and accumulator



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



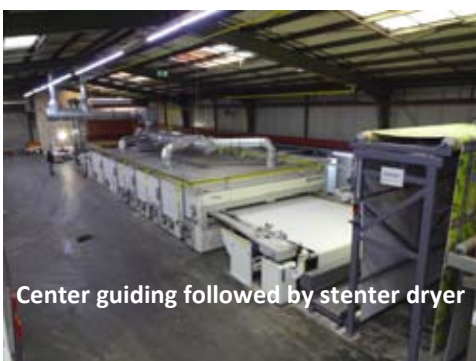
Washing and vacuum unit



Accumulator before roll-up unit



Reverse Osmosis water preparation



Center guiding followed by stenter dryer



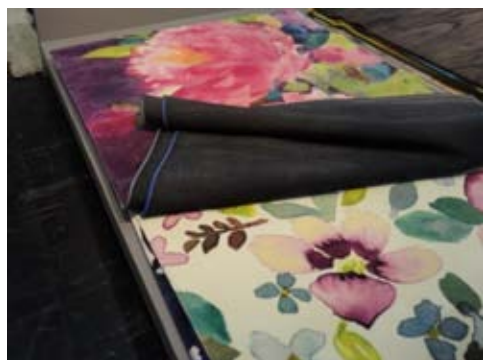
Dryer with stenter chain for unbacked  
and conveyor belt for backed carpet



Roll-up unit with foil dispenser

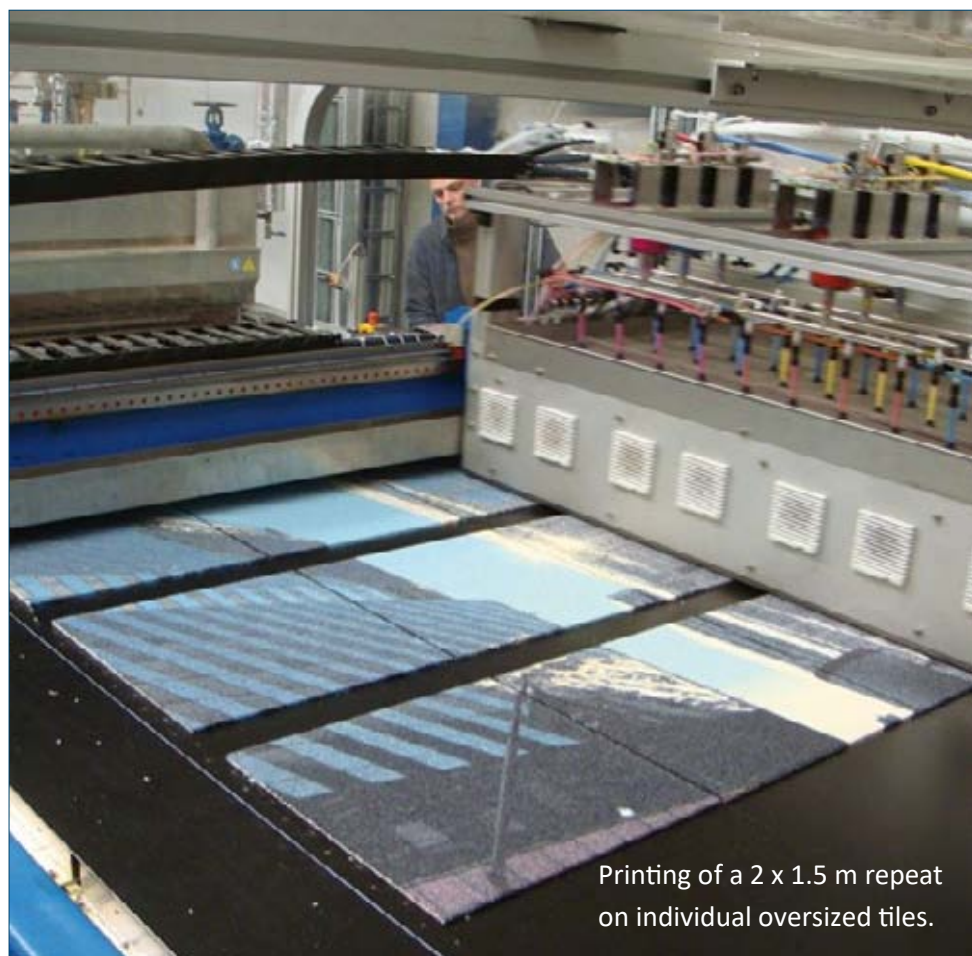


# TUFTED AND WOVEN.RUG PRINTING





# 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



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