

Digital printing makes floor carpeting attractive again

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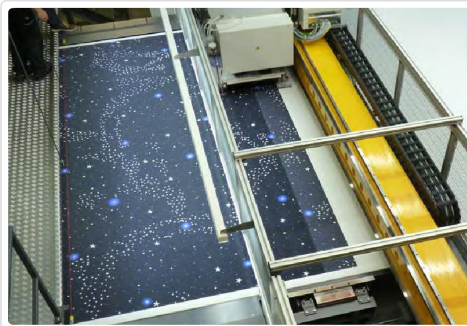
Digital printing makes floor carpeting attractive again

With their carpet companies Infloor and Girloon, Stefanie Ritterbach und Ulrich Dresing have successfully established digital carpet printing. They expect that the many advantages of digital technology will boost the sales of textile floor coverings.

Starting after the ITMA International Textile Machinery Trade Fair in Milan (Italy) in November 2015, our companies have been intensively engaged in converting our carpet printshop from **CHROMOJET** to digital printing. After the favourable experience with the laboratory system acquired in 2016 and many new findings, we ordered the first 400 cm wide digital printing system of the **COLARIS** series from **ZIMMER AUSTRIA** in Kufstein/Austria in mid-2017. We were confident that we would be able to cope with the risks associated with a new technology through the high level of in-house competence and the support of manufacturer **ZIMMER AUSTRIA**.

Within only five weeks, between December 2017 and January 2018, the **COLARIS** was configured here at our production site in Herzebrock-Clarholz (North Rhine-Westphalia, Germany) in such a way that we were able to make the first proofs. It then took just three more weeks until we had printed and delivered the first orders. Thanks to the great commitment of all employees from our technology and design departments, but also thanks to the support and the trustful cooperation with **ZIMMER AUSTRIA**, we were able to start regular production at the end of February 2018.

Our **COLARIS** digital printing process provides a number of major advantages: sensational print results, simplified production, flexibility, environmental protection, resource conservation and cost savings.



Sensational printing results

Due to an extremely high resolution of up to one billion pixels/m² our prints now have a perfect outline sharpness – previously just one million pixels/m² were possible. This technology can be compared with a digital camera: The higher the resolution or the more pixels available, the sharper the image will become. The final printing colours are mixed in the jet of the printheads within milliseconds. This technology offers an infinite variety of colours. Until now, the available range was limited to a mere 16 colors per design.

The **COLARIS** system enables us to produce designs which were simply impossible on the conventional printing systems. For example, we can now print the finest woven patterns or tufted designs – a quality level that was previously unimaginable for us. All our own fabric types such as loop, smooth velour, frisé and Saxony can be printed on our digital printing machine without any problems.



Simplified production process

In the past, we had to prepare every single colour in the required quantity in a separate colour tank. After production end, all the tanks and the entire piping system had to be rinsed and afterwards refilled with the new dye preparations for the next production run. This set-up time always required two to three hours. Digital printing requires almost no set-up time: Color preparation in color tanks is not necessary. Any colour required for a design will be generated from the four primary colours red, yellow, blue and black. As described above, this happens directly in the print jet during printing.

High flexibility

The very simple production process results in a high degree of flexibility: Our former system required individual color preparation in color tanks, and thus a production of less than 300 m² was not profitable. The new digital printing system now enables us to print even the smallest metrages.

Environmental and resource savings / cost reductions

With our digital printing system, we save up to 30% water and energy compared to traditional carpet printing, and we consume about 80% less dyes and additives.

All these mentioned facts show the infinite advantages of digital printing. We are convinced that nobody in our company would prefer to go back to the old printing technology. In fact, everyone is happy that we have taken the plunge into digital printing and that we are able to enjoy all the listed benefits in our marketplaces.

In combination with our self-adhesive carpet modules we have the possibility to create wood, stone and other optics that look incredibly realistic. This opens up completely new possibilities for us to make carpeting attractive on the market again.

Stefanie Ritterbach and Ulrich Dresing