The new design freedom, combined with the most modern **CHROMOJET** printing system of the world, can result in sharper image focus, more colorful and more brilliant carpet patterns with immediate effect.

Regarding the technical equipment the carpet manufacturer from Oelsnitz was always one of the leading companies in the carpet industry. With the start up of the new digital printing machine, which also produces the orders of the HTW Design Carpet subsidiary company, the company has made a great leap forward: since August 2008, Halbmond offers the most modern printing plant of the world – overtaking their competitors with a unique variety for color permutations that are unprecedented.

"The last day of the old era"

August 17th 2008 was the last day of the old era. On August 18th the **CHROMOJET**^{400} production plant, custom-built for Halbmond, was started up in Oelsnitz. A new part of the company's history was in place, after all the multimillion investment sets the course for the future. Halbmond and HTW Design Carpet will distance themselves from their competitors as far as quality, fl exibility, and delivery times are concerned.

"360,000 printer dots per square meter"

The innovative nozzle technology of the **CHROMOJET**^{400} printing system scores all down the line. For example, with the signifi cantly higher print density: instead of the hitherto existing 360,000 printer dots per square meter, now the printing consists of 1 million pixels on one and the same area. The result: extreme accuracy, smooth color gradient, photo realistic prints – patterns in unprecedented brilliance.

With the start up of this innovation, Halbmond presents not only the most modern injection printing plant in the world but also – as measured by the colors – the biggest. Up to 24 colors can be printed at the same time.

A further advantage: 12,288 nozzles present improved design print stability, reducing the standstills which benefits the quality of the product.

"Increases its production capacity by 50%"

Halbmond increases its production capacity by 50% with the investment in the new **CHROMOJET**^{400} printing system presenting sig nificantly more flexibility in the order processing. In short, Halbmond and HTW Design Carpets' customers can look forward to prints in the highest brilliance and also to shorter delivery times.

Background CHROMOJET

10 m wide, 9 m long and 3,5 m high, these are the impressive dimensions of the new **CHROMOJET**^{400} printing system. Not less impressive is the variety of 24 different colors that can be individually mixed for the different patterns and the printing process itself. A moveable sliding carriage moves with 12,288 paint nozzles over the 4 metre wide carpet web while the nozzles open and close computer-controlled – up to 400 times per second. Once the print head has completed the forward and backward movement, the web is automatically moved forward accurately to a tenth of a millimetre. This way, the following color printing sequence starts at exactly the part of the base web goods, which is already printed to the bottom of the pile. The ordered pattern is developed like this bit by bit, while each and every dot of the 1 million dots is exactly there where it has to be.

ZIMMER AUSTRIA | Zimmer Maschinenbau GmbH

The manufacturer of this **CHROMOJET**^{400} printing system and supplier of the respective software and computer system is the

company **ZIMMER AUSTRIA** from Kufstein, Austria, one of the leading companies in the field of carpet and textile printing and coating machines.

In 2007, **ZIMMER AUSTRIA** founded two competence centres, one for digital printing in Kufstein, and one for screen printing in Klagenfurt, in order to focus amongst other reasons a reinforcement of the research and development area. Combined with experiences of many decades and not least due to customer proximity this focusing guarantees that the machines developed by Zimmer are worldwide installed by leading users.