### 医 Smurfit Kappa



#### Portrait

Smurfit Kappa was founded in 2005 and is currently the leading supplier in the production of corrugated packaging, containerboard and 'bag in box' in Europe. Smurfit Kappa has 350 production sites worldwide, 21 subsidiaries in Europe and 12 in America, making Smurfit Kappa the leader in its industry.

The Chespa Group was founded as a family business in 1991 in Krapkowice, Poland. After almost 30 years of activity as a specialist in prepress services and printing support, the company established itself internationally in the flexible packaging and corrugated board sector. Worldwide Chespa employs approximately 600 people at more than 11 locations in 6 European countries as well as other production facilities and agencies in South America, Asia and Africa. Their focus is on the preparation and processing of graphic repro as well as the production and distribution of auxiliary and process materials for the packaging industry. The company is the only European supplier to produce flexographic printing plates, cutting tools and printing inks (flexographic, offset, gravure, digital printing) from a single source. Over 15 years Chespa has been an indispensable partner of Flint Group in the distribution of nyloflex<sup>®</sup> printing plates in Germany, Austria and Eastern Europe.

# Seeking optimal printing results in corrugated postprint

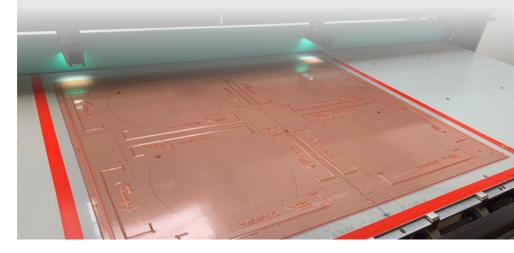
A cooperation of industrial partners in the development and launch of the nyloflex<sup>®</sup> FTL Digital.

#### Development of products together with industry partners

The quality requirements in corrugated postprint has always been a great challenge, especially when it comes to poorer quality (or lower cost) board grades. Not only half-tone images but good solid ink transfer is an important quality criteria, where an even ink laydown is an important quality criteria. The main influencing factors are the quality of the liner, the type of flute and the relief geometry on the flexographic printing plate.

Flint Group always aims to develop new products as closely as possible to the market needs and in cooperation with industry partners, in order to address customer demands in a targeted manner and work out a solution together.

During the development of the nyloflex<sup>®</sup> FTL Digital, Flint Group found two very qualified and committed companies in Chespa (reproduction and printing plate production at the Leipzig site) and Smurfit Kappa (printing at the Lübbecke site) for the evaluation of the nyloflex<sup>®</sup> FTL, which accompanied the test phase of the product development up to the market launch.





## Real test conditions for repetitiveness and quality of the printing result

Chespa and Smurfit Kappa were ideal partners in the product development of nyloflex<sup>®</sup> FTL and made valuable contributions to the product launch through extensive testing under production conditions. For Flint Group it was important to test the printing plate in a real production environment to ensure that the development was as close to the markets needs as technically possible and to validate the product performance in the development phase. The test series were printed at Smurfit Kappa's Lübbecke site, which offered suitable conditions for the application fields of the nyloflex<sup>®</sup> FTL. The test panels printed at Smurfit Kappa were all produced at Chespa Leipzig, where the data preparation was also handled. First test forms were printed to evaluate the limits of the printing plate. Production jobs were then implemented in order to test not only the good printing performance of the first tests but also the quality over the entire print run with several jobs and designs. "The most important challenges in meeting our customers' needs are the repeatability and quality of the print result", explains Lutz Klemm, Managing Director at Chespa.

nyloflex<sup>®</sup> FTL Digital is an inherent flat top dot printing plate for corrugated postprint as well as for paper and board applications in combination with waterbased inks. Amongst others, it is suitable for printing on sustainable substrates with a higher proportion of recycled fibers.

#### The result is a significant reduction in fluting

The nyloflex<sup>®</sup> FTL has inspired and convinced Smurfit Kappa from the first print. The potential of this printing plate was already apparent during the first print runs. Thanks to better ink transfer and improved ink laydown, Smurfit Kappa was able to improve the print quality, especially in the solid coverage. The ability to reduce the impression setting minimises the fluting effect and thus achieves excellent printing results on uncoated testliner or kraftliner in combination with B-flute. Less deformation of the corrugated board makes it easier for the printer to meet the specified crush tolerances of the end customer in order to guarantee optimum packaging stability. Alternatively, it is possible to use printing substrates with lower grammages to save packaging material. 66

With Flint Group we have a qualified and innovative partner for printing plates on our side. Both the Flint Group and the Chespa Group thrive on close exchange, cooperation and the great trust of their customers. Our central task is to develop ourselves further, to push ahead with innovations and the latest production technologies and to offer customized products and services tailored to the customer's specific requirements.

Mr. Klemm, Managing Director at Chespa

