Sometimes, only the most exclusive design is appropriate. This applies to flexible packaging that creates showcase for the product to be sold. When high-class branding is the goal, HD flexo printing facilitates excellent print results.

The benefits are manifold: color contrast, brilliant images, consistency in printing process etc. The process achieves a higher printing quality than conventional flexo printing, basically similar to gravure printing, making it a viable alternative.

With regards to ink, several factors contribute to the quality of HD flexo printed packaging. The particular focus here is on an exceptional half tone printing. The increased quality is a result of various factors: high resolution printing plates, very fine, low volume anilox rollers and specially adjusted printing inks.

The amount of transferred ink is reduced and consequently the ink film becomes thinner but nevertheless achieving high color strength. To establish the process reliably, Siegwerk supports customers with extensive guidance. Some parameters need to be met, in order to create good preconditions for an excellent ink for flexo printing. For example, adjusting drying speed to avoid drying on the anilox or the printing plate is crucial. Even over long print runs the ink stability needs to be very high to ensure clean and uniform printing. In most cases, Siegwerk can adjust the conventional flexo printing inks to meet the increased HD flexo printing requirements, usually for process colors.

In television technology, at first it was a luxury feature. By now, HDTV is the acknowledged industry standard. HD Flexo printing is able to compete with the visual quality of gravure and offset printing. Siegwerk is well-equipped for this evolution.
DEVELOP AND OPTIMIZE

We feel that offering a mere product is not enough. Thus, we have made the strategic decision to guide customers to optimize functionality and the efficiency of their print jobs rather than selling ink. Based on decades of experience, Siegwerk places great value on developing and optimizing solutions and customers’ product portfolios. The company engages in a broad range of activities to help partners creating more efficient processes, attractive designs and improve packaging functionality. Precisely analyzing customers’ requirements and assessing the best solution contributes to innovative packaging ideas and gives expert insight in considering cost-performance ratios. In this regard, the ink itself adds to higher efficiency in both the print and the packaging process. Being at the interaction of substrates, inks, and adhesives, Siegwerk enables this by developing specific formulations and optimizing ink portfolios for particular market requirements. Oftentimes, this includes a portfolio simplification leading to fewer downtimes, improved stock level, and, all in all, a commercially and technically best fit for use ink portfolio.

SOLVING PROBLEMS

PART 1: GHOSTING

If in flexo printing, after a printing and packaging process, it occurs that a weak printed image is visible in one part of the motif where it should not be, the technical term is "ghosting effect". It oftentimes crops up in the case of a solid print with negative fonts or with windows. There are various causes for this problem, with different solutions (see chart below).

COMPREHENSIVE PRODUCT SAFETY

Do all good things come in threes? That is not quite enough, when it comes to product safety at Siegwerk. In this case, the magic number is four:

- Safe products
- Systematic processes
- Product safety guidance
- Proactive safety work

From understanding and controlling migration mechanisms via various internal safety nets (such as our sophisticated raw material introduction process and global formulation guidelines) and facilitating extensive know-how sharing all the way to supporting legislative procedures.

This newsletter will introduce one of the four categories of product safety at Siegwerk in each upcoming issue, respectively.

Please contact your account management team for more information.