

Trade Press Article - Draft

How to help flexo printers improve their processes and solve problems?

Flexography is perhaps the only printing method of relevance in the package printing arena that affords a dedicated center of expertise to evaluate its materials, methods and solutions. For almost 25 years the DFTA Technology Center (DFTA TZ) in Stuttgart, Germany, has been instrumental in developing novel products for the ever expanding Flexo printing market. Most of the new solutions introduced into the flexographic printing market over the course of these more than 20 years have experienced their "first moment of truth" in the DFTA TZ. How can Flexo print shops benefit from this "pooled experience"?

Like most developing methods Flexography does have a bunch of particular needs, concerns and challenges. This may be press bouncing and lack of productivity in one place, excessive dot gain and insufficient solid coverage in an other, or questions around 7C fixed colour palette printing and questionable proof-to-print matching in yet another. And not every Flexo printer will know his way through the "jungle" of potential press setups consisting of a vast choice of different printing forme materials including almost as many ways to manufacture them, cushion mounting tapes or other substructures, Anilox rollers or substrates. This is where the DFTA Technology Center sees its main justification.

Advanced Flexo Training Courses

The lion's share of the Flexo printing expertise gathered throughout these almost 25 years of continuous work has been packed into a week of combined hands-on and classroom training. This course, held in the English language for an international clientel, does now run twice per year and finds ever more interest. Quite a number of companies that had attended the course with one or more participants are now amongst the top candidates to win print quality awards. Earning a reputation of delivering top print quality has, of course, helped the financial bottom line in more than occasional cases.

The contents of such courses range from an entry-level Flexo overview all the way down to the topics flexographers need to master in order to fully understand their process, solve occurring problems right away, optimise and simplify their workflows and achieve award-winning print quality. The educational methods for comprehending all this have been developed over two decades and are continually monitored for further improvement. Amongst others, they involve a good mixture of classroom workshop and practical press handling on a veritable industry size CI press (Bobst Flexpress 6S/8).





Flexo Press Experiments

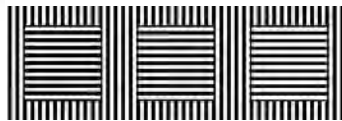
Whenever the aforementioned CI press in Stuttgart is not used for training courses it may be rented by all companies of the Flexo community for their private purposes, which may range from benchmarking experiments aimed at comparing new materials with existing market offerings down to outright promotional print jobs, emphasizing their particular product(s). This service is being booked by the system suppliers predominantly, but Flexo printers do use it, too, for doing their own testing of (new) materials.

Advancing Flexo 2.0

For the last 10 years the DFTA TZ team has continually developed their own ideas of how to advance Flexography. This striving has produced several signal elements suitable to visualize particular press settings like the Anilox-to-plate impression engagement, the plate-to-substrate impression engagement or for detecting the faintest traces of slur. Signals of this kind have helped many a flexographer all over the world to visualize setup faults and therefore being able to optimize his process and prevent many print problems from occurring at all, thus improving on productivity and consistency of print quality.



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Making setup faults visible and then being able to avoid them more safely than otherwise is certainly worthwhile the effort, however, better still would be if we could make the Flexo process even more robust so that setup is indeed less critical to quality from the outset. This is why the DFTA TZ team has even entered the arena of halftone screening. Their DFTA Screens (V4.2 for Round-Top-Fotopolymers and V5.x for Flat-Top print forms) have demonstrated very successful that Flexo is indeed able to achieve a true 1% printed (!!) tonal value consistently. This capability does broaden Flexo ´s scope of application much in that it is no longer necessary to "hide" a first printing dot step with reprographic tricks that need time and expertise to be applied and go at the expense of print quality. The DFTA Screens are openly available for DFTA members by now.

25 years at Flexo ´s service

With its 25th anniversary approaching the DFTA Technology Center looks back at a very successful career of supporting Flexography at large and its players in particular. There is much reason to be proud of what Flexo has achieved since. However, there is still some way and work ahead – albeit in helping Flexo get its well-deserved prime position in its reputation with the print buyers.

Stuttgart, June 2017

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