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[Research & Development]



UVX

CLOSING THE GAP!

Traditionally Coates Screen is offering market-oriented products, adjusted to the requirements of our customer.

The latest developments of our UV ink ranges MLS and MTR are well accepted and successfully used on the market. For a detailed description of the properties of MTR please refer to our last Screen News edition. Multistar MLS characteristics can be found on page 13 of this magazine.

Printing of PVC, rigid PVC boards as well as plasticized PVC adhesive foils is still an important issue for many printers. It is known that most UV inks will cause brittleness of PVC materials. Also UV inks may extremely reduce impact strength of rigid PVC and tear resistance of PVC self-adhesive foils.

In addition to our "classic" UVN ink range to date our universal MLS inks were often used as these show a low tendency to embrittlement.

Our ink range MTR – originally developed for deep drawing applications – has shown special suitability for PVC adhesive foils. With this type impact strength and edge curl were no longer an issue. Reactivity of MTR is insufficient for quick running printing equipment with reduced UV light emission. This was the reason why we have now developed another ink range – especially for printing onto PVC.

UVX - A NEW FLEXIBLE AND - TOUGH & ELASTIC INK RANGE FOR PVC

A printing ink is supposed to form a resistant ink film. "Soft" inks would be ideal for PVC foils in regard to tear resistance, however, the mechanical resistance would hardly meet requirements, especially on rigid PVC. On the other hand a hard and brittle coating will cause those problems well known to screen printers. What we need for this application is a property best described as "tough and elastic". And that is exactly what we can now achieve with ink type UVX.

Contrary to most other UV-inks impact strength of rigid PVC materials is not reduced much.

Depending on the type (and also due to "plasticizer" content) plasticized PVC materials show various elasticity and stretching properties. UVX will allow forming to a certain extent and, in most cases result in sufficient elasticity.

UVX cannot be deep drawn like MTR. However, a small degree of cold shaping is possible.

When developing this ink range we did not only pay attention to the technical properties but also to lowest possible content of potentially hazardous substances.

First we will introduce UVX process inks. C-MIX 2000 colour shades will follow shortly.