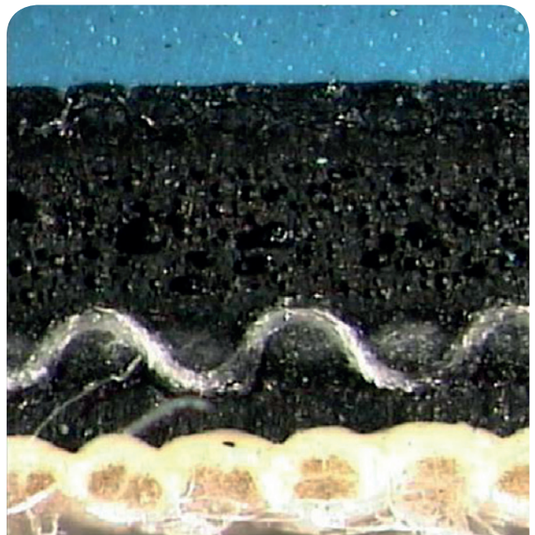
Fount additives for UV printing

Most founts in the Böttcher portfolio of products for conventional printing applications are also suitable for use in UV printing. Especially good results have been achieved with **VitaFount Gold, S3007 and S3007K**.

UV printing blankets

Blankets play a crucial role in the printing process. UV applications, which often involve printing on foils and other non-absorbent substrates, pose special requirements for blankets. In addition to good chemical resistance to UV inks and washes, it goes without saying that high-quality color and tone reproduction as well as a good damping system and outstanding “quick-release” are of primary importance.

We recommend the **BöttcherTop 4800** und **BöttcherTop 8800** straight EPDM blankets for use in LED-UV printing applications and with highly sensitive inks. **BöttcherTop 4400 and 8200** have performed very well in mixed-mode operations.

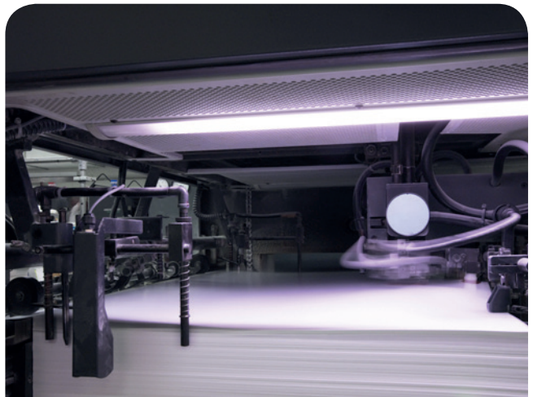


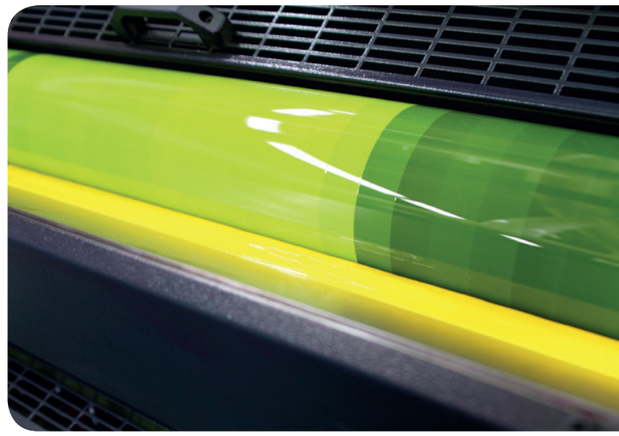
Printing with UV ink

The percentage of print products produced with UV technology is rising steadily. UV printing now plays an increasingly important role, especially in package printing, as it offers an extraordinary range of options for finish-processing. Special gloss effects can be achieved with varnishes designed for that purpose, and printing on non-absorbent substrates such as foil and plastic cards also offers a variety of possibilities.

Process technology in UV sheetfed offset has been continuously improved in recent years. Both presses and consumables, such as inks and coatings, have been continually upgraded. Printing rollers for straight UV printing have also been modified in order to meet the increasingly demanding requirements posed by modern presses. Roller coverings have also been adapted to constantly changing ink systems. New, more energy-efficient drying systems introduced to the market under such designations as LE-UV, LED-UV, H-UV, etc., offer new possibilities for printers in the UV segment.

The Böttcher portfolio of UV roller coverings offers solutions for all ink systems available in the market today. Böttcher offers suitable roller coverings for both conventional UV inks and ink systems developed specifically for use with low-energy drying units.





In general, such highly reactive UV inks designed for the new drying systems can be printed with the same roller compounds as conventional UV inks. The proven **EPDM compounds 726 40** and **715 25**, which can be found as original equipment in presses produced by nearly all leading press manufacturers, can be used for exclusive UV operations as well as UV sheet-metal and foil printing. Inking roller **compounds 277 30 and 377 38** (including pertaining damping roller **compound 135 25**) have been developed for more aggressive ink systems and washes and as a favorably priced alternative for mixed mode operations. These quality grades developed on the basis of a mixed-mode compound are also suitable for use in straight UV printing operations in cases in which EPDM rollers cannot be employed due to the other chemicals used in these operations. Thus this new series of compounds for all press manufacturers and models is a valuable alternative wherever swell-inducing UV foil inks and/or aggressive washes are used.

Systems ▶▶ UV Printing

Mixed-mode operations pose very special requirements for roller coverings. Emphasis is placed in this context on chemical resistance to both conventional and UV inks, good dimensional stability and good cleanability in connection with ink changes. **Compounds 471 38, 171 25 and 375 38** are in use as OEM-quality equipment on presses produced by all leading press manufacturers.

Böttcher regularly tests all compounds in the existing portfolio for resistance to printing inks currently available on the market. In these DIN tests, defined test objects are placed in contact with the ink for a specified period of time, and the volume and weight of the test objects are measured both before and after testing.

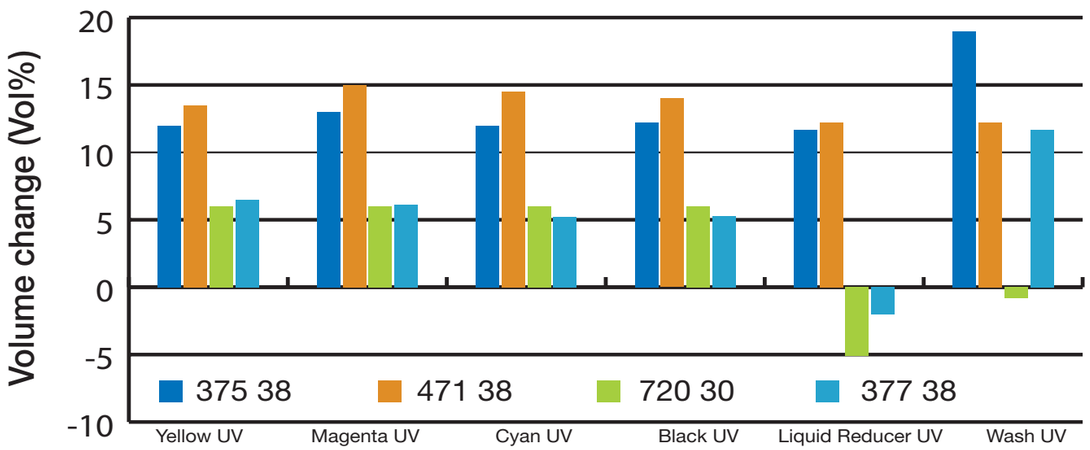
Changes which take place in these values while the test object is in contact with the medium provide important information about the behavior of the rubber compound in the printing press.

An overview of all Böttcher compounds for UV printing

Compound	Application
726 40 / 715 25	EPDM inking rollers
134 25 / 135 25	Damping form rollers for mixed-mode printing
147 25 / 128 25	Water pan rollers
277 30 / 377 38	Inking rollers for use with aggressive inks, also in mixed-mode printing
471 38 / 171 25	Inking rollers for use in mixed-mode printing
375 38	Inking rollers for use in mixed-mode printing (less expensive)

The advantages of Böttcher UV compounds

- Excellent chemical resistance to existing UV ink series and washes
- Very good dimensional stability
- Less effort required for adjustments
- Stable printing process
- Reduced waste
- Longer service life



Washes for UV printing

Complex interactions during the printing process affect the service life of rollers and printing blankets. Aggressive or unsuitable washes can cause premature wear and even result in the destruction of rollers and blankets. Only those washes that are specifically adapted to the requirements of rollers and blankets do not cause troublesome interactions and thus contribute to a stable printing process. Our products are also adapted to the specific requirements of press manufacturers and certified by FOGRA.

What applies to rollers basically applies to washes as well. In most cases, even the newer UV inks can be effectively dissolved and removed with conventional UV washes. Böttcher offers several products with excellent cleaning power in the UV wash segment, all of which are adapted for use in the various different applications and presses.

Special cleaner

BöttcherPro Cleanfix-UV is a cleaning paste designed specifically for use with UV inks and for rapid ink changes and basic roller cleaning. Also available for special manual cleaning and blanket cleaning is **Böttcherin EG-UV**, which also removes dried ink effectively. We recommend our **BöttcherPro Rol-O-Gel**, which is suitable for use with all roller compounds, to protect against dry running.

Washes	Application
Feboclean UV	For automatic cleaning systems; approved by Heidelberg and manroland
Böttcherin Offset UV	For automatic cleaning systems; approved by Heidelberg and manroland
Böttcherin Offset UV XL	Enhanced offset UV; ideal for highly sensitive UV inks and for automatic cleaning systems; approved by Heidelberg and manroland
Böttcherin UV 60-S	For KBA cleaning systems; for extra-sensitive printing plates on other presses as well
BöttcherinUV Elettra	For Elettra cleaning systems
Böttcherin UV Chameleon	For use with UV and conventional inks and as an alternative in straight UV printing