

# Böttcher roller compounds, printing chemicals and blankets for the newest generation of compact newspaper presses

For years, press manufacturers' engineering design departments specified rubber rollers with hardnesses ranging from 20 to 35 Shore A for inking rollers in offset newspaper presses. In some cases, harder inking roller coverings for especially wear-sensitive rollers were specified by manufacturers or requested by press operators.

More recently, however, new compact newspaper presses with completely reconfigured printing couples have gained a firm foothold in the market. These include, for example, the Goss FPS (Flexible Printing System), the KBA Cortina and Commander CT and, most recently presented at the IFRA 2011 in Vienna, the Goss Colorliner CPS and the KBA Commander CL. Durometers of 45 to 60 Shore A are specified for inking rollers in some of these presses. Unique engineering features such as the compact design, shorter ink trains with fewer nips, narrower printing stripes, keyless inking units, constant-force roller locks and innovative temperature controls pose new challenges for elastomer roller coverings.

It goes without saying that Böttcher meets these requirements, and thus a significant number of the compact presses now in operation are equipped with Böttcher OEM rollers, which conform ideally to the following catalogue of requirements:



Picture: König & Bauer AG

- Hardness ratings of 25, 30, 35 to 45 or 60 Shore A, depending upon specifications.
- Outstanding dynamic properties suitable for operation at high speeds and deformation frequencies
- Low heat build-up, even at maximum web speeds.
- Excellent chemical resistance and dimensional stability in contact with the inks and chemicals used in compact presses.



Systems ►► Web Offset

- Maximum precision with respect to geometrical tolerances ensures precise and uniform nips, for both cylindrical and crowned roller geometries.
- Excellent ink-transfer performance ensures superior print results.

Due to the wide range of different printing inks and chemicals currently available in the market for coldset and semi-commercial applications, it is not enough to offer only a single roller compound with the required Shore hardness that conforms to the requirements listed above. Instead, several different formulae must be selected from the range of rubber qualities, each of which responds individually to different or changing contact chemicals in order to achieve optimum roller performance and service life and help avoid the necessity of making compromises. The extensive product range also facilitates the selection of special compounds for mixed mode printing, i.e. operations which alternate between coldset and heatset or between conventional and UV inks.

Böttcher offers a series of roller compounds for this market segment. These compounds have achieved outstanding results on over 100 printing towers in compact newspaper presses.

#### Inking roller compounds for compact newspaper presses with conventional Shore A hardness ratings:

- 274 30 (30 Shore A) / 374 35 (35 Shore A)
- 204 30 (30 Shore A) / 304 35 (35 Shore A)

also suitable for semi-commercial printing applications:

- 111 25 (25 Shore A) / 211 30 (30 Shore A) / 311 35 (40 Shore A)

#### Dampening roller compounds for compact newspaper presses with conventional Shore A hardness ratings:

- 114 25 (25 Shore A) / 214 30 (30 Shore A)

for semi-commercial printing applications:

- 118 25 (25 Shore A) / 218 30 (30 Shore A)

for UV (mixed-mode) printing:

- 134 25 (25 Shore A)

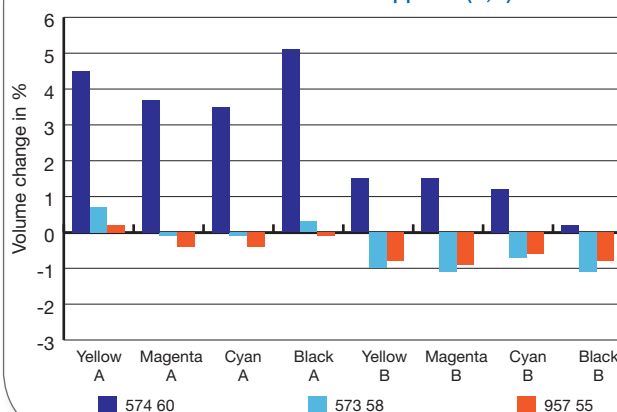
#### Roller compounds for compact newspaper presses with high Shore A hardness ratings:

- 511 45 (45 Shore A)
- 513 45 (45 Shore A)
- 573 58 (58 Shore A)
- 574 60 (60 Shore A)
- 957 55 (55 Shore A polyurethan)

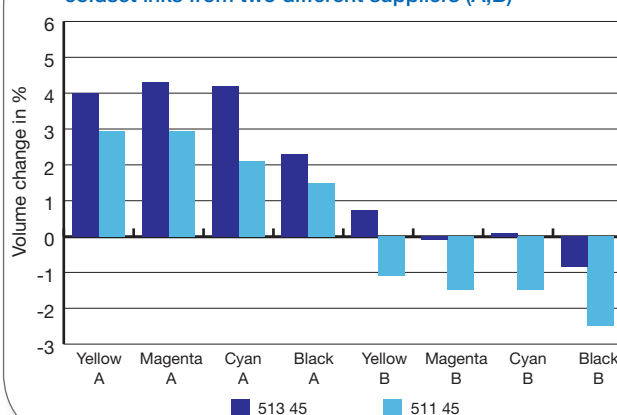
for UV (mixed mode) printing

- 471 38 (38 Shore A)

Chemical resistance of roller compounds with coldset inks from two different suppliers (A,B)



Chemical resistance of roller compounds with coldset inks from two different suppliers (A,B)



Please contact us so that we can define and select the best roller coverings for your specific application in dialogue with you, press manufacturers' engineering designers and ink and chemicals manufacturers.



*Stochastic Rilsan-Film roller profile*

## Film Rollers

In order to prevent the reproduction of film roller structures in the print image, especially in compact inking units with fewer distribution points, Böttcher also offers a unique, patent-pending stochastic film roller profile that is created with the aid of lasers on Rilsan rollers. Depending on your specific requirements, profiles can be varied on a continuous scale and adjusted to specific customer needs

## Washes and cleaning webs

Böttcher offers a wide range of washes for manual washing and for automatic roller and blanket washing systems. The program also includes VOC-free and filterable washes.

Many modern compact presses are operated with cloth cleaning systems for automatic printing blanket washing. These systems work either with pre-soaked cleaning webs or dry cleaning webs in combination with liquid washes.

## Washes

### Böttcherin Twister CS:

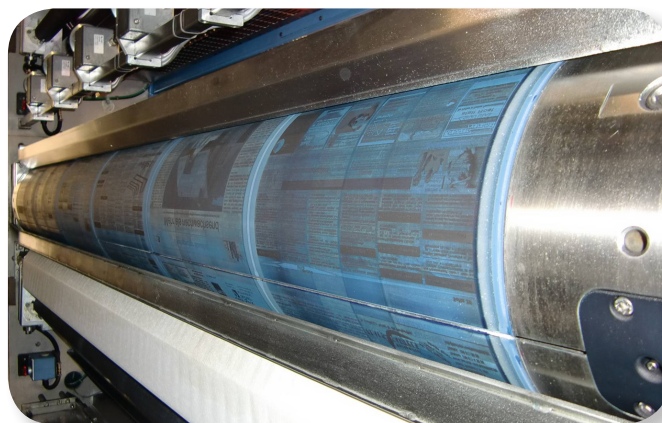
VOC-free wash approved by manroland, Koenig & Bauer, FOGRA and Baldwin. Recommended for use on Baldwin Impact washing systems in combination with dry cleaning webs and water.

### Böttcherin Lavanta und Lavanta non VOC:

Micro-emulsions consisting of wash and water. Approved by manroland, Koenig & Bauer, FOGRA and Baldwin. Recommended for use on Baldwin Impact washing systems in combination with dry cleaning webs without separate water feed.



*Dirty printing blanket (note the large amount lint)*



*Printing blanket after washing with Böttcherin Twister CS*



## Cleaning Webs

### BöttcherTex Optima White:

Hydro-entangled staple fiber, nonwoven fabric made of polyester and cellulose fibers with high tensile strength, friction and lint resistance and optimized absorbency for use in blanket cleaning units in newspaper printing.

### BöttcherTex Supreme:

Cleaning cloth for automatic blanket cleaning devices without direct feed lines for washes. The system consists of a dry cloth roll and Böttcherin Supreme wash, the washing agent soaking the cloth roll immediately prior to use.

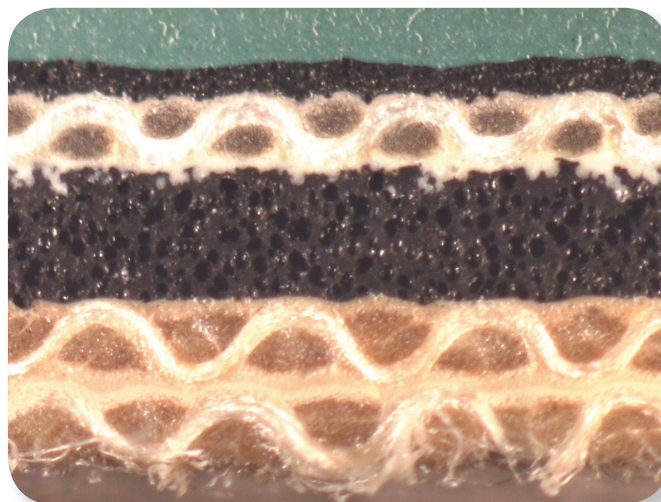


*Pre-soaking of BöttcherTex Supreme with Böttcherin Supreme Wash*

## Printing Blankets

Böttcher offers printing blankets in the Twin series for all printing couple configurations (except for metalback and blanket sleeves). These are suitable for conventional as well as semi-commercial and UV (mixed mode) printing applications.

- BöttcherTop 7300 Twin
- BöttcherTop 7500 Twin
- BöttcherTop 7600 Twin



*BöttcherTop Twin series with two compressible layers*