



# ROLLER COVERINGS FOR THE PRODUCTION OF METAL PACKAGING

## SHEET COATING & PRINTING OF FOOD CANS AND BOXES

### THE REQUIREMENTS

- Purity
- Wettability
- Constant properties and quality in time
- Resistant to edge cutting and marking
- Easy to regrind
- Easy to cut and groove

For the production of food cans, tin boxes and drums, the final product is made out of tin plated sheet.

Elastomer coated rollers play an important role in the lacquering, varnishing, printing and conveying processes, as well as for cutting, stamping and transforming the sheet.

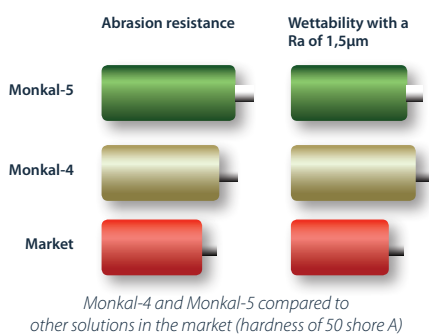
Also the lids and closures are made out of sheet. More and more mechanical and laser engraving are used to apply the lacquer in accordance with the required design.

Hannecard offers high performance solutions for all those applications.

### 1. LACQUERING AND VARNISHING ON SHEET

The varnish needs to be applied in a uniform way on the sheet, mostly by using a combination of a metal transfer roller and an elastomer coated applicator roller. Sheet coaters can be equipped with single or double side coating.

Hannecard is recognized as one of the world leading companies as to roller covering for sheet, coil and can coating applications. Recommendable qualities for coating on tin and aluminium sheet are :



Type	Solution	Characteristics and advantages
Rubber	<b>MultiCoat-SB</b> 35-65 Shore A	<ul style="list-style-type: none"> <li>• Universal quality for applicator rollers</li> <li>• Can be applied to all varnish types</li> <li>• Easy to grind and groove—good grooving stability</li> <li>• Specifically interesting for short runs</li> <li>• Can be laserengraved</li> </ul>
Polyurethane	<b>Monkal-4</b> 40-65 Shore A	<ul style="list-style-type: none"> <li>• Highest quality for applicator rollers</li> <li>• Can be applied for most varnish types</li> <li>• Very high wettability (surface energy)</li> <li>• Easy to grind and groove—good grooving stability</li> <li>• Can be laser engraved</li> </ul>
Polyurethane	<b>Monkal-5</b> 15-65 Shore A	<ul style="list-style-type: none"> <li>• High abrasion resistance</li> <li>• Very low hardness possible</li> <li>• Recommended for long production runs</li> </ul>



## Applicator sleeves

Hannecard offers a unique sleeve solution for varnishing rollers. With sleeves, the rubber or polyurethane coating can be replaced within a few minutes.

Some advantages offered by the sleeve system :

- No need to invest in a large amount of rollers
- Sleeves can be stored using less space
- Engraved finishes (e.g. for lids, crown corks, format changes etc.) can be easily managed and quickly exchanged on the machine
- Adapted to both rubber and polyurethane solutions and to different types of (laser) engraving

## Transfer rollers

Hannecard has developed a new generation metal cover based on chromium carbide to replace the classic chrome plating.

Type	Solution	Characteristics and advantages
<b>Carbide</b>	<b>HanneSpray-Cr Plus</b>	<ul style="list-style-type: none"> <li>• Very high hardness (up to 1100 HV)</li> <li>• Extended lifetime compared to chrome plating</li> <li>• No use of carcinogenic Cr6+ or Cr3+</li> <li>• Very low porosity (&lt;0,2%)</li> <li>• Very low surface roughness possible (Ra &lt; 0,05 µ)</li> <li>• Thickness 50 to 200 µ</li> </ul>



## Blankets

Hannecard has a long tradition in the production of blankets, suited for adapted lacquering machines. All Hannecard blankets are confectioned, pressed and ground according to strict procedures and with the highest precision.

Type	Solution	Characteristics and advantages
<b>Rubber</b>	<b>MultiCoat-BL</b> 35 Shore A	<ul style="list-style-type: none"> <li>• Specific compound for lacquering blankets</li> <li>• Very high purity and homogeneity</li> <li>• Excellent wettability and transfer properties</li> <li>• Excellent solvent resistance</li> </ul>

## THE HANNECARD ADVANTAGE

- Standard, as well as high performance solutions for all applications
- Pure and homogenous covering qualities with high wettability for coating
- Easy regrinding
- Complete product range for all printing techniques
- Follow-up and technical support
- Fast and complete service
- Supply of new, complete rollers

## 2. PRINTING ON SHEET

In most cases, sheet offset is used to print on metal. Often classic, greasy inks are used, followed by a hot air tunnel for drying. More and more, this method is being replaced by shorter UV-drying installations, permitting easy multi-colour printing but requesting solvent based inks. Sometimes, both techniques are combined.

Hannecard offers top-quality roller coverings for all possible printing techniques :

Type	Solution	Characteristics and advantages
Rubber	<b>MultiPrint-I</b> <b>MultiPrint-M</b> 25-50 Shore A	<ul style="list-style-type: none"> <li>• Suited for classic offset printing with greasy inks</li> <li>• Outstanding ink and water transfer properties</li> </ul>
Rubber	<b>MultiPrint-SP</b> 35 and 45 Shore A	<ul style="list-style-type: none"> <li>• Suited for printing with dry UV inks</li> <li>• Excellent transfer and wettability properties</li> <li>• Very good mechanical properties</li> <li>• Excellent resistance against chemical cleaning products</li> </ul>
Rubber	<b>MultiPrint-XP</b> 45-55 Shore A	<ul style="list-style-type: none"> <li>• Suited for combined printing with classic inks and UV inks</li> <li>• Remarkable abrasion and cut-in resistance</li> <li>• Recommended for enhancing the lifetime on plate inking rollers</li> </ul>
Polyurethane	<b>MultiPrint-XL</b> 45-50 Shore A	<ul style="list-style-type: none"> <li>• Suited for waterless offset (printing on cans)</li> <li>• Improved abrasion resistance</li> </ul>

## 3. OTHER APPLICATIONS

### Drive Rollers, Guiding and Pull Wheels

Rollers of different diameters and lengths are mounted, both on varnishing machines and on sheet metal cutters. They serve as drive, guiding and centring rollers and are submitted to mechanical actions and edge cutting. Hannecard can adapt the covering and the hardness to enhance performance and lifespan of these rollers :

Type	Solution	Characteristics and advantages
Polyurethane	<b>Hannethane-S</b> 70-95 Shore A	<ul style="list-style-type: none"> <li>• Suited for all applications requiring higher hardness</li> <li>• Excellent abrasion and cut-in resistance</li> <li>• Short delivery time is possible</li> </ul>
Polyurethane	<b>Hannethane</b> 40-60 Shore A	<ul style="list-style-type: none"> <li>• Suited for all applications requiring lower hardness</li> <li>• Excellent abrasion and cut-in resistance</li> <li>• High and constant grip</li> </ul>
Polyurethane	<b>Hannethane-CR</b> 40-90 Shore A	<ul style="list-style-type: none"> <li>• Coverings with high and constant roughness in the mass</li> <li>• Enhances grip during a longer time</li> <li>• When the grip reduces, a simple regrind brings back the full roughness</li> </ul>

### Skeleton Ejector Rollers

The Skeleton ejector is situated at the end of the press and evacuates the waste metal immediately after stamping. These rollers can have different sizes, according to the machine type.

Type	Solution	Characteristics and advantages
Polyurethane	<b>Hannethane-S</b> 70-95 Shore A	<ul style="list-style-type: none"> <li>• Excellent abrasion and cut-in resistance</li> <li>• Short delivery time is possible</li> </ul>

## RELATED DOCUMENTS

Metal Packaging - Spray and beverage cans