



# ROLL COVERING FOR THE PRODUCTION OF TAPE, ADHESIVE FILM AND LABELS

The processes that lead to finished adhesive products are amongst the most critical in the industry. Covered rollers play a decisive role in the management and stability of the entire process and in the quality of the end product. Hannecard offers proven solutions. Together with OEM's and engineering companies, we cope with new challenges such as constantly increasing line speeds, cost saving needs and fast changing products.

## REQUIRED CHARACTERISTICS

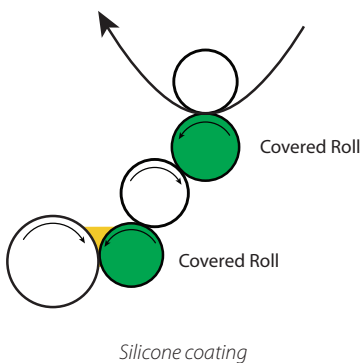
- Purity
- Wettability
- Transfer properties
- Excellent dynamical stability, also at high speed
- Smooth and defect-free surface
- Severe tolerances on run-out and cylindricity
- Very low surface roughness
- Compatible with cleaning products

## SILICONE COATING

Silicone coating is undoubtedly one of the most important operations in the production of release liners for labels. A good silicone layer will assure the easy removal of the label, without losing its stickiness. Nowadays, label producers tend to reduce the silicone consumption, while operating at increasing line speeds (up to 1000 m/min).

On the other hand silicone can also be applied as finish layer, sometimes with decor colours and with high gloss.

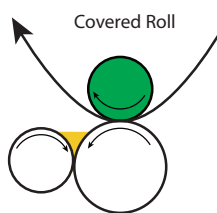
Hannecard offers coverings with a guaranteed performance, combined with unrivalled grinding tolerances and surface properties. All of the below mentioned qualities are also available in an anti-static version.



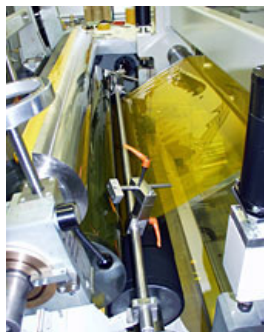
Type	Solution	Characteristics
Standard Rubber	<b>MultiCoat-SB</b> Green 35-65 shore A	<ul style="list-style-type: none"> <li>• Excellent surface properties</li> <li>• High purity</li> <li>• Resistant to temperatures up to 120°C</li> </ul>
Improved Rubber	<b>MultiCoat-XP</b> Green 50-60 shore A	<ul style="list-style-type: none"> <li>• Improved dynamical behaviour and physical properties</li> <li>• Resistant to temperatures up to 130°C</li> </ul>
High end PU	<b>SilkCoat Monkal-5</b> Blue/Green/Cream 50-70 (80) shore A	<ul style="list-style-type: none"> <li>• Best dynamical stability at high speed</li> <li>• Special, defect free casting technology</li> <li>• Excellent transfer properties, suitable for both low and high coating weight</li> <li>• Resistant to temperatures up to 80°C</li> </ul>
Special PU	<b>SilkCoat +</b> White 55-80 shore A	<ul style="list-style-type: none"> <li>• Highest transfer properties and surface energy</li> <li>• Recommended for low coating weight</li> <li>• Helps reduce the silicone consumption</li> </ul>
	<b>SilkCoat-AS</b> White 55-80 shore A	<ul style="list-style-type: none"> <li>• Anti-static</li> <li>• Reduces the fire risk for toluene and solvent based coating (transparent silicone)</li> </ul>

## REQUIRED CHARACTERISTICS

- Constant quality
- Smooth and defect-free surface
- Severe tolerances on run-out and cylindricity
- Often anti-static or conductive properties
- Compatible with cleaning products
- Low surface roughness
- Low compression set



Cold glue application



## SELF ADHESIVE (GLUE) COATING

Depending on the product type, self adhesive coatings can be applied by cold or hot technologies.

### Cold glue application

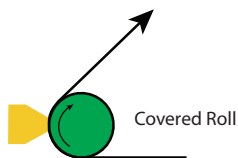
Glue can be applied by transfer technology, by direct application or by curtain coating. Usually, the back-up roller is elastomer coated. Hannecard provides the right covering, combined with an extreme dimensional precision.

Type	Solution	Characteristics
Standard rubber	<b>MultiGraf-SB</b> Green 65-80 shore A	<ul style="list-style-type: none"> <li>• Standard quality for both water and solvent based adhesive coating</li> <li>• Excellent resistance to alcohol, acetates and cetones</li> </ul>
Standard rubber Anti-static	<b>MultiGraf-SB-AS</b> Black 65 & 85 shore A	<ul style="list-style-type: none"> <li>• Universal quality for the coating of water- or solvent-based adhesives</li> <li>• Excellent resistance to alcohol, acetates and cetones</li> <li>• Anti-static</li> </ul>
Special rubber Non-stick	<b>MultiGraf-SL</b> Grey 85 shore A	<ul style="list-style-type: none"> <li>• Only suited for solvent free adhesives</li> <li>• Non-stick surface characteristics</li> </ul>
Special rubber Anti-static	<b>ClearCoat-S-AS</b> Green 65-85 shore A	<ul style="list-style-type: none"> <li>• Anti-static with light colour (non black)</li> <li>• Non-staining</li> <li>• Excellent resistance to alcohol, acetates and cetones</li> </ul>
High performance Polyurethane	<b>PressoGraf-XP</b> Black 90 shore A	<ul style="list-style-type: none"> <li>• Very high cut-in and abrasion resistance</li> <li>• Anti-static</li> <li>• Only suited for solvent free adhesives</li> </ul>
Release performance Polyurethane	<b>HanneRelease</b> Black 40-85 shore A	<ul style="list-style-type: none"> <li>• Very high cut-in and abrasion resistance</li> <li>• Semi-conductor</li> <li>• Improved release properties</li> </ul>

### Hot melt application

These processes involve glue at high temperature or coating by means of cast plastic film.

The covered back-up roll can have different functions, depending on the process. Dynamical rubber deformation can occur. Below are the solutions provided by Hannecard. Custom solutions and anti-static versions are available on request.



Hot-melt application

Type	Solution	Characteristics
Standard Rubber	<b>MultiGraf-SL</b> Grey 85 shore A	<ul style="list-style-type: none"> <li>• Standard quality for adhesive coating</li> <li>• Excellent resistance to alcohol, acetates and cetones</li> <li>• Resistant to temperatures up to 130°C</li> </ul>
High Temperature Rubber	<b>Vulcan</b> Red 60-80 shore A	<ul style="list-style-type: none"> <li>• Excellent non-stick properties</li> <li>• Resistant to temperatures up to 260°C</li> </ul>
Double layer elastomer	<b>Lotus-XR</b> Cream	<ul style="list-style-type: none"> <li>• Non-stick fluor-elastomer outer layer</li> <li>• Resistant to temperatures up to 250°C</li> <li>• Improved dynamical behaviour and physical properties</li> <li>• Easy to clean</li> <li>• Regrindable</li> </ul>
Double layer	<b>Lotus-FEP</b> <b>Lotus-PFA</b> Black 70-90 shore A	<ul style="list-style-type: none"> <li>• Complex non-stick Teflon® outer layer</li> <li>• Resistant to temperatures up to 260°C</li> <li>• Non-stick</li> <li>• Surface roughness : Ra 0,4µm</li> <li>• Easy to clean</li> </ul>

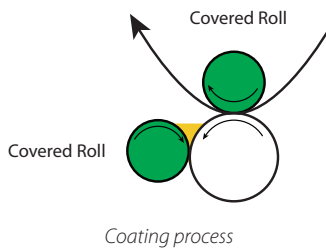
## OTHER COATING PROCESSES

In the domain of adhesive film and paper production, several techniques can be applied for primer and finish coating.

Hannecard supplies rubber, as well as polyurethane roller coverings suited for both water and solvent based coatings.

Depending on the process, the pick-up, transfer or back-up roll can be elastomer coated.

All qualities mentioned below are also available in anti-static versions.



Type	Solution	Characteristics
Standard rubber	<b>MultiCoat-SB</b> Green 35-80 shore A	<ul style="list-style-type: none"> <li>• Excellent surface properties</li> <li>• High purity</li> <li>• Resistant to temperatures up to 120°C</li> </ul>
High-end PU	<b>Monkal-5</b> Green transparent Yellow transparent 50-70 (80) shore A	<ul style="list-style-type: none"> <li>• Best dynamical stability at high speed</li> <li>• Special, defect free casting technology</li> <li>• Improved transfer properties, suitable both for low and high coating weight</li> <li>• Resistant to temperatures up to 80°C</li> </ul>

## SLEEVES

Hannecard's high grade coverings are either available as roller coating or applied to sleeves.

The necessary production mandrels and equipment is at hand to provide (*tapered*) sleeves that meet the demands of most machine types.

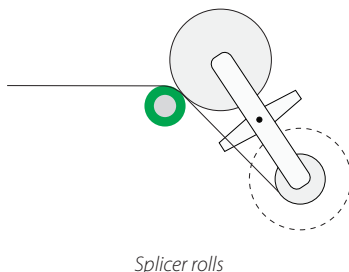
The **EasySleeve** series is suited for applicator and transfer rollers, as well as for back-up rollers in laminating and coating processes.

## OTHER APPLICATIONS

Different elastomer coated rollers are used in contact with adhesive and label liner in order to enhance the production and converting.

## Splicer Rolls

For continuous production lines, often operating at high speed, the splicing of paper and foil spools needs to be fully reliable. Hannecard offers a range of special solutions.



Solution	Characteristics
<b>MicroGraf</b> Black - Foam rubber 40 shore 00	<ul style="list-style-type: none"> <li>• Foam rubber covering with excellent resilience and physical properties</li> <li>• Especially suited for paper liner</li> </ul>
<b>MicroGraf Plus</b> Black - Foam rubber Double layer	<ul style="list-style-type: none"> <li>• Foam rubber with closed top layer</li> <li>• Enhanced abrasion resistance, avoids rip-out of the foam rubber</li> <li>• Top layer hardness : recommended 60 shore A</li> </ul>
<b>SpliceoGraf-XP</b> Yellow - PU 22 or 30 shore A	<ul style="list-style-type: none"> <li>• Soft compact coating with excellent deformability and good physical properties</li> </ul>

## RELATED DOCUMENTS

- Solutions - 'Cast Film Extrusion'
- Solutions - 'Lamination & Coating'
- Solutions - 'Label and narrow web printing'
- Solutions - 'Plastic Film Spreading'
- Solutions - 'Winding and Slitting'
- Solutions - 'Corona Treatment'
- Product Information - 'Lotus'

## Web Control

Tensioning, winding and ducting need to be managed throughout the complete production line, certainly when high speed is involved. In some cases, coverings require anti-static, non-stick and/or high temperature properties.

Below are some of Hannecard's solutions. These coverings can be provided with special surface finishes and grooves. Read more about the extended possibilities in our specific leaflets related to plastic film production and transformation.

Solution	Characteristics
<b>PressoGraf-SB</b> Black - Rubber 70-85 shore A	<ul style="list-style-type: none"> <li>• Standard solution with excellent resistance to solvents</li> <li>• Anti-static</li> <li>• Good physical properties and abrasion resistance</li> <li>• Resistant to temperatures up to 125 °C</li> </ul>
<b>HanneStar-AS</b> Black - Rubber 25-80 shore A	<ul style="list-style-type: none"> <li>• Recommended for spreader and winder rollers</li> <li>• Anti-static</li> <li>• Good physical properties and abrasion resistance</li> <li>• Resistant to temperatures up to 110 °C</li> </ul>
<b>NipFoil-HT</b> Red - Rubber 55-80 shore A	<ul style="list-style-type: none"> <li>• Recommended for high temperature, high release applications</li> <li>• Resistant to temperatures up to 260 °C</li> </ul>
<b>NipFoil-HT-AS</b> Black - Rubber 55-80 shore A	<ul style="list-style-type: none"> <li>• Recommended for high temperature, high release applications</li> <li>• Anti-static</li> <li>• Resistant to temperatures up to 260 °C</li> </ul>
<b>PressoGraf-XP</b> Black - PU 90 shore A	<ul style="list-style-type: none"> <li>• Outstanding physical properties and abrasion resistance</li> <li>• Anti-static</li> <li>• Resistant to temperatures up to 90 °C (dry)</li> </ul>
<b>Hannethane-SC</b> Black - PU 40-85 shore A	<ul style="list-style-type: none"> <li>• Outstanding physical properties and abrasion resistance</li> <li>• Semi-conductor</li> <li>• Improved release properties</li> <li>• Resistant to temperatures up to 90 °C (dry)</li> </ul>
<b>HanneRelease</b> Black - PU 70-90 shore A	<ul style="list-style-type: none"> <li>• Outstanding physical properties and abrasion resistance</li> <li>• Semi-conductor</li> <li>• Exceptional release properties</li> <li>• Resistant to temperatures up to 90 °C (dry)</li> </ul>

### THE HANNECARD ADVANTAGE

- Special rubber and polyurethane technology
- Classic, anti-static and semi-conductor coverings and coverings with improved release properties
- Production process assuring the highest purity and constant quality
- Special high precision grinding, polishing and measuring equipment
- Contactless dimensional inspection (laser measurement method)

## MORE INFORMATION?

For more information, please contact your local Hannecard partner or visit our website at:

[www.hannecard.com](http://www.hannecard.com)