



# ROLLER COVERING FOR THE METAL INDUSTRY CLEANING & DEGREASING

## Exceptional lifetime, maximum performance

Most transformation and coating lines for steel and aluminium strip are equipped with cleaning sections in order to remove protection oils and lubricants and to prepare the strip for the next step.

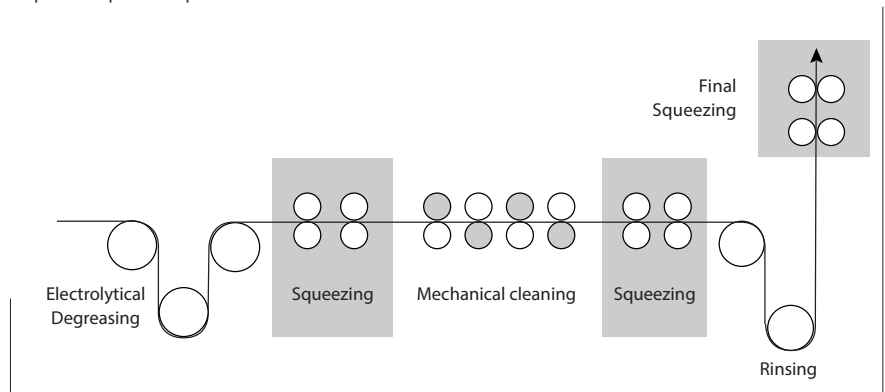
The success of this cleaning operation widely depends upon the performance of elastomer

covered rollers, which are submitted to specific chemical and physical conditions.

The Hannecard Group offers a range of roller covering concepts, which guarantee a maximum performance combined with an exceptional lifetime.

### THE CHALLENGES

- Products based on sodium hydroxide (NaOH), potassium hydroxide (KOH) or orthosilicates
- For aluminium, acid degreasing is possible (sulphuric or phosphoric acid)
- Surface tensioning aids
- Foam inhibitors
- De-ionized water
- Temperature between 50 and 95°C
- Line speeds up to 900 m/min
- Irregular and/or cutting strip edges



### THE SOLUTIONS

- Maximum resistance to cutting and abrasion
- Chemical resistance to the degreasing products and to the oils and lubricants
- Resistance to continuous high temperatures
- Excellent surface, wringing and steering behaviour
- Special finishing for better grip and steering
- Definition of the ideal (curved) profile
- PRINTAM® base layer and total protection technology
- Mechanical and restorative maintenance of the rollers

Type	Solution	Characteristics
Standard	<b>MetalClean-S</b> Black - Rubber 65 & 75 shore A	<ul style="list-style-type: none"> <li>• Excellent wringer behaviour, even at low pressure</li> <li>• Very good abrasion and cut-in resistance</li> <li>• Cost efficient</li> <li>• All-round quality, but particularly recommended for alkaline cleaning and water rinse</li> <li>• Suited for squeegee and sink rollers, as well as for brush counterparts</li> </ul>
	<b>MetalClean-XP</b> Black - Rubber 75 shore A	<ul style="list-style-type: none"> <li>• Improved chemical stability</li> <li>• Improved temperature resistance</li> <li>• Excellent abrasion resistance</li> <li>• Suited for both alkaline and acid cleaning</li> <li>• Recommended for the squeegee rollers</li> </ul>
High performance	<b>MetalSqueeze-XP</b> Black - Rubber 60-65-70 -75 & 80 shore A	<ul style="list-style-type: none"> <li>• Improved chemical stability</li> <li>• Excellent wringer behaviour, even at low pressure</li> <li>• Excellent abrasion resistance</li> <li>• Suited for both alkaline and acid cleaning</li> <li>• Suited for squeegee and sink rollers, as well as for brush counterparts</li> </ul>
	<b>Hannelyse*</b> Brown - Polyurethane 75 & 85 shore A	<ul style="list-style-type: none"> <li>• Exceptional abrasion and cut-in resistance</li> <li>• Improved dynamic behaviour</li> <li>• Recommended only for squeegee rollers</li> <li>• Suited for alkaline degreasing and water rinse</li> </ul>
Special	<b>Everlast</b> Brown - Polyurethane 80 shore A	<ul style="list-style-type: none"> <li>• Fully resistant to all acid and alkaline solutions up to 85 °C</li> <li>• Unrivalled chemical stability, less property losses due to chemical attack</li> <li>• Very good abrasion and cut-in resistance</li> <li>• Recommended for acid cleaning operations (aluminium and non-ferrous strip)</li> </ul>

\* Recommended with special PRINTAM® base layer



## PRINTAM® : LONG LASTING PROTECTION

The Printam® technology is based on the combination of acid resistant resins and reinforcing fibres. It replaces the traditional hard rubber (ebonite) base layers and offers an almost complete protection against incidental cut-ins of the metal strip.

As such, acid infiltration and corrosion of the metal core is prevented.

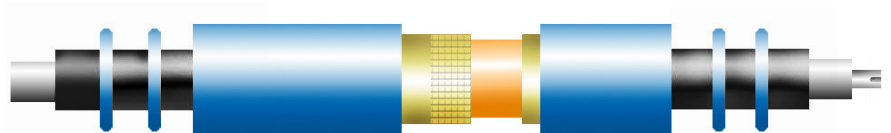
Printam® base layers make it possible to use high performance polyurethane covers without the risk of bonding failures. Indeed, Printam® forms a barrier against vapour penetration through the PU and avoids corrosion underneath the bonding layer.

And there are plenty of other advantages.

Printam® can be combined with the latest rubber technology for roller end protection : MetalProtect-XP

### THE ADVANTAGES OF PRINTAM®

- Resistant to most chemical environments even at high temperature
- Resistant to edge cutting, as such preventing corrosion due to acid penetration
- Long lasting
- Can accept up to 5 times recoating
- Repairable
- Reduces the cost of recoating
- High bonding strength with all Hannecard rubber and PU covering qualities
- Avoids bonding failures with polyurethane covers, even at high temperature



### RELATED DOCUMENTS

- Solutions - **'Steel, Stainless Steel & non ferrous coils'**
- Solutions - **'Stainless Steel Pickling'**
- Solutions - **'Carbon Steel Pickling'**
- Solutions - **'Cleaning & Degreasing'**
- Solutions - **'Colour Coating & Chemcoating'**
- Solutions - **'Management of Mechanics'**
- Product Information - **'Printam'**

### OPTIMISING THE WRINGER QUALITY

Getting the most out of your squeegee rollers does not only depend on the choice of the covering quality.

Hannecard helps you to optimise all parameters and to reach a maximum performance level :

- Failure mode analysis, roller inspection after use
- Measurement and analysis of the pressure nip between the squeegee rollers
- Profile optimizing (cylindrical, parabolic camber...)
- Roller alignment
- Solutions adapted to driven, partly driven and non driven rollers
- Avoid slip and aquaplaning
- Optimizing of cover hardness, thickness and surface aspect

### MORE INFORMATION?

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

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