



ROLLER COVERING FOR THE METAL INDUSTRY PASSIVATION & CONVERSION COATING

THE HANNECARD ADVANTAGES

- Rubber and polyurethane solutions with long service life
- Perfect behaviour in contact with all passivation and conversion products
- Low surface contamination
- High purity and homogeneity
- Surface finish (Ra-value) between 0,4 and 3,5 μm
- Optimized solutions for improving the coating thickness and aspect
- Adapted solutions for high temperature passivation
- Unique Monkal® technology for applicator rollers
- Special thermal spray coatings for pick-up rollers

Most metallic strip products require a passivation or conversion treatment in order to make them suited for use in automotive, construction, household and many other applications.

In this process, a thin insoluble layer is applied on the surface of the metal strip, giving it one or more of the following properties :

- Corrosion protection
- Improved adhesion layer for future coating
- Lubrication
- Aesthetic improvement

The best known treatment is chromate passivation, but due to increasing concerns about the toxicity of chrome 6 (Cr6+), other products based on chrome 3, titanium and zirconium have been introduced. Also phosphate and fluor based products are often used.

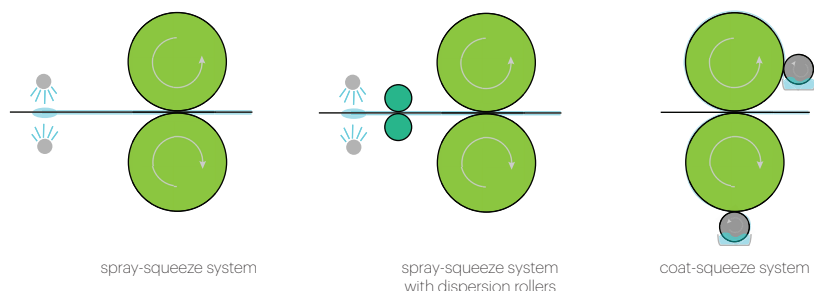
In most cases lastomer coated rollers are used to apply the layer. They play a critical role in controlling the thickness and aspect. Nowadays, often chemical coaters are used, but also spray-squeeze units and combined machines.

Hannecard is a world-wide recognized specialist when it comes to choosing the right rollers and elastomer covers for these applications. Our solutions are based on many years of experience and include professional advice. This allows us to reach the highest quality of the end product, as well as the best service life.

Spray-squeeze & coat-squeeze technology

These methods allow the insertion of small units in horizontal position. As the dosing of the coating is less accurate, the squeegee rollers play an important role in obtaining the required quantity and aspect.

Hannecard offers different rubber and polyurethane solutions, adapted to each specific machine, as well as special surface finishes to perfectly control the layer thickness for both bottom and top side.



● squeegee roll (MET-D1) ● dispersion roll (MET-D2)

Solutions for squeegee rollers

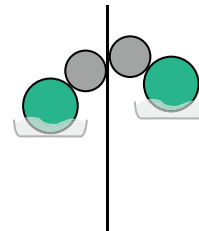
Solution	Type	Characteristics
ClearSqueeze-XPE	Special rubber 50, 60, 70 & 80 shore A Blue	<ul style="list-style-type: none"> • Excellent chemical resistance to all passivation and conversion products, even at higher temperature • High purity, non-staining • Very good edge squeezing • Very good mechanical strength and abrasion resistance • New ECO quality
SmartSqueeze-TopSqueeze	Special rubber 50, 60, 70 & 80 shore A Green / Grey	<ul style="list-style-type: none"> • Very good chemical resistance to all passivation and conversion products • High purity, non-staining • Very high mechanical strength and abrasion resistance • For high load applications and longer service life
Hannedyn	Special polyurethane 60 shore A Blue	<ul style="list-style-type: none"> • Good chemical resistance to all passivation and conversion products up to 40 °C • High purity, non-staining • Outstanding abrasion resistance • Perfect edge squeezing, due to improved deformability • Very long service life between regrinds

Solutions for dispersion rollers

Solution	Type	Characteristics
MetalSqueeze-S	Rubber 60, 70 & 80 shore A Black	<ul style="list-style-type: none"> • Standard rubber solution • Very good chemical resistance to all passivation and conversion products • Special surface finish for perfect dispersion
MetalSqueeze-XP	Rubber 60, 65, 70, 75, 80 & 90 shore A	<ul style="list-style-type: none"> • Improved rubber solution, improved service life • Excellent chemical resistance to all passivation and conversion products, also at high temperature • Special surface finish for perfect dispersion
Hannethane-S	Polyurethane 70, 80, 90 & 95 shore A	<ul style="list-style-type: none"> • Polyurethane solution for highest service life • Good chemical resistance to all passivation and conversion products up to 40 °C • Special surface finish for perfect dispersion

Chemical coating

A roll coater, placed in vertical position, guarantees the best controlled application of passivation and conversion chemicals. Stainless steel pick-up rollers are used to improved the dosage. By means of speed differences in forward or reverse direction, both coating quantity and aspect can be perfectly controlled.



Double-sided chemical coating

- chemical coater roll (MET-N2)
- pick-up roll (MET-N6)

Hannecard provides worldwide the best solutions for the applicator rollers and can also provide long-lasting coatings, as well as surface control for the metallic pick-up rollers.

Solution	Type	Characteristics
Monkal-4®	Beige 40 - 65 Shore A Polyurethane	<ul style="list-style-type: none"> • Opaque polyurethane • Best surface energy (wetting) properties in the market • Good chemical stability to most chemcoating products up to 40 °C
Monkal-5®	Green 15 - 70 Shore A Polyurethane	<ul style="list-style-type: none"> • Transparent polyurethane • Extended hardness range • Improved abrasion resistance • Good chemical stability • No pick-up of solids, low contamination, easy to clean
MultiCoat-SB	Green 35 - 75 Shore A Rubber	<ul style="list-style-type: none"> • Very high chemical resistance to (acid) surface treatment products up to 80 °C • Medium abrasion resistance
MultiCoat-XP	Green 50 - 60 Shore A Rubber	<ul style="list-style-type: none"> • Very high chemical resistance to (acid) surface treatment products up to 60 °C • Very high resistance to abrasion and to edge cutting. Maximum lifetime

Solution	Type	Characteristics
Hannespray-CR / CR+	900 - 1100 HV Chromium Carbide	<ul style="list-style-type: none"> • Very high density and hardness • Extended lifetime compared to chrome plating • Shock and impact resistance • Thickness 75 - 300 µ • Possible to apply on stainless steel roller core

MORE INFORMATION?

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