

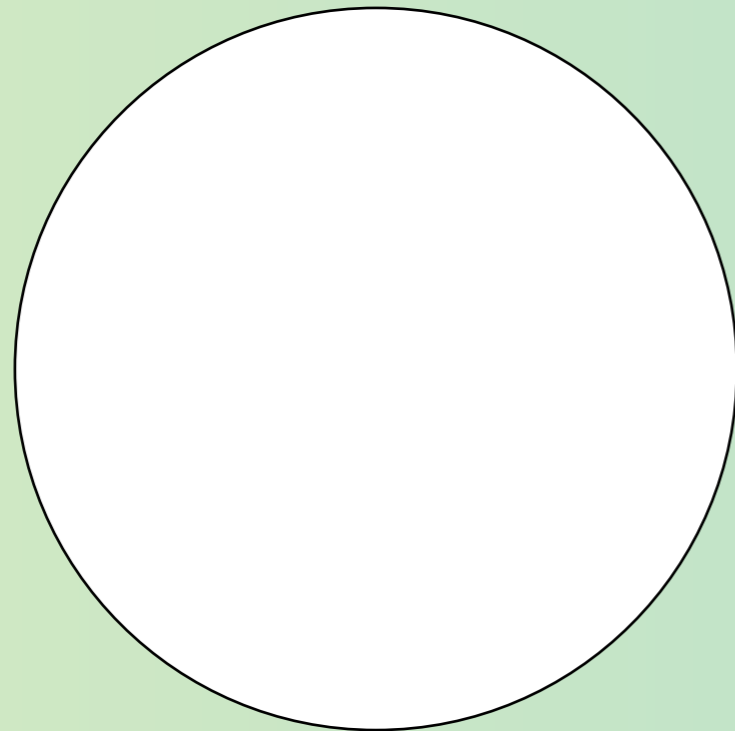
TOTAL ROLLER SOLUTIONS



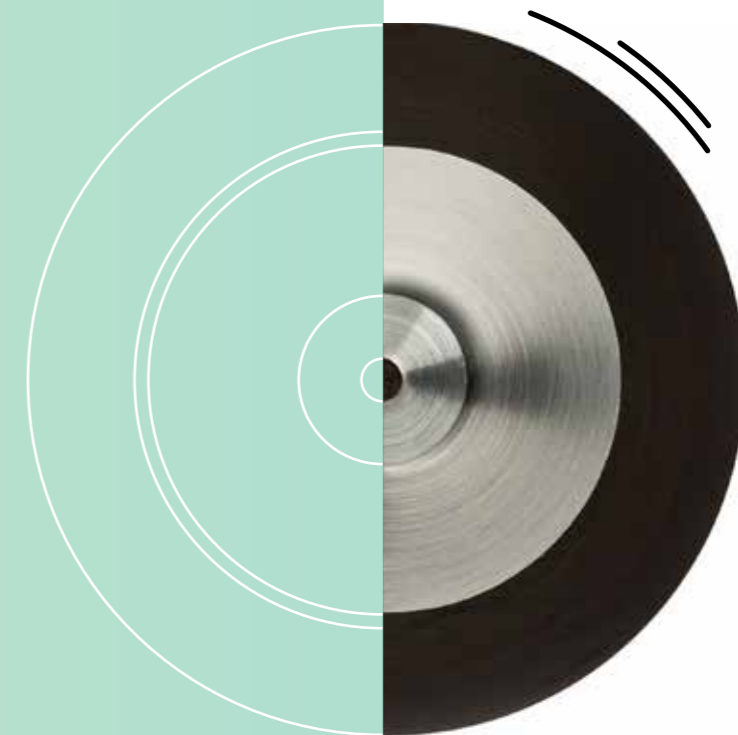
HANNECARD
YOUR ROLLER EXPERT

TABLE OF CONTENT

- 01. About Hannecard**
- 02. Industries**
- 03. R&D and quality**
- 04. Strength & values**



- 05. Products**
 - 5.1 Roller coverings**
 - 5.2 Composite & rubber sleeves**
 - 5.3 Sanforizing rubber shrinking belts & clupak blankets**
 - 5.4 HandyCoat®**
- 06. Services**



01 About Hannecard

- HANNECARD PLANTS
- JOINT VENTURES & LICENSEES



Europe's leading
supplier of
industrial roller
and sleeve
coverings

Worldwide expansion

With more than 120 years of experience, Hannecard is Europe's leading supplier of industrial roller and sleeve coverings in rubber, polyurethane, composite and carbide to various sectors. Hannecard also offers a wide range of other services, like maintenance, repair and roller optimization.

Hannecard's aim is to improve your company's performance by providing comprehensive and reliable long-life solutions, a unique range of roller coverings and services and measuring roller performance. Smart monitoring systems are used to track roller performance, which will enable us to carry out predictive maintenance in the future and better meet your ongoing needs.

Hannecard group & joint-ventures

The growth of the Hannecard Group has been characterized by a strong international focus and a commitment to improving service in local markets.

Our local partnerships ensure that Hannecard technology is available across and beyond European borders and enable complete standardization of our roller coverings.

Worldwide Presence

Hannecard technology and solutions are always within your reach, thanks to our global presence and local approach.



Continents



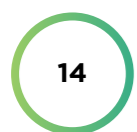
Production plants



Employees



Covering solutions



Countries



Joint-ventures



Years of experience












Active customers

02 Industries

For all industries

Hannecard supplies roll and roller coverings to fit any industrial process. Thanks to our many years of experience and continuous innovation, you can be sure you will always get the best possible solutions.

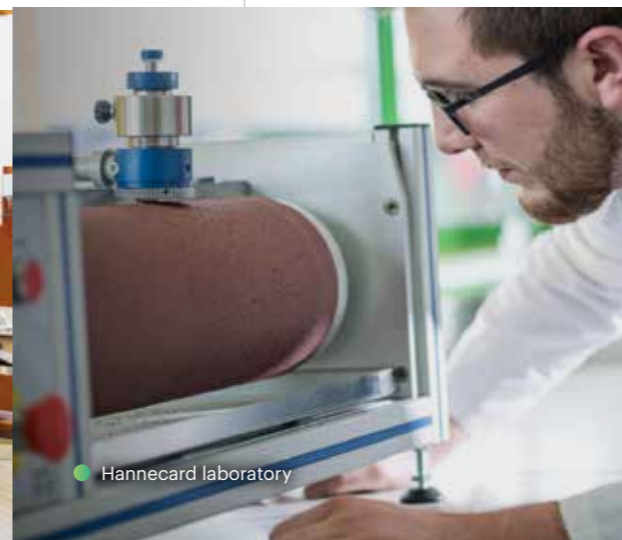
- | | | |
|---|---|--|
|  Paper |  Tissue |  Metal |
|  Plastic |  Packaging |  Print |
|  Textile |  Food |  Wood |

03 R&D and Quality

Focus on technology & development

Research and performance improvement have always been the cornerstones of the Hannecard Group's activities. innovative ideas, technological progress and new product developments are central to the group's performance and added value.

At Hannecard's global and local laboratories, dedicated teams of researchers and developers work constantly to develop new rubber, polyurethane, thermal spray and composite solutions that are appropriate for each client's specific operating conditions and meet the demands of the market.



04 Strength & Values

Our Values

Responsiveness, innovation and passion are three of our core values. In today's world customers need tailor-made, high-performance solutions. We listen actively to clients' needs and strive to deliver services and coatings which empower our customers and enhance their productivity. We believe in strong relationships based on trust, experience and knowledge. We focus on growth, innovation and improving every day, for our customers and also for our employees.

Our Strengths



Focus on innovation



Own laboratories & mixing facilities



Sustainable policy



Total solutions: covering, maintenance & optimization



Digitization: automated document flows



Proximity, support & worldwide services



Control of coverings from A to Z



Long term approach



Know-how & customer oriented

05 Products

5.1 Roller Coverings

Hannecard is constantly developing new compounds and solutions to optimize your production process and quality. Today's product range consists of over 1000 elastomer, composite and thermal spray coverings, enabling us to offer the best possible solutions for all your needs.

Choosing the right material for your industrial roller applications can have a significant boost on production speed and running time. We at Hannecard are always ready to advise you on your coating choices to achieve your best possible performance. We currently offer 4 different families of roller coatings, all fully REACH compliant.



5.1.1 Rubber coating

At Hannecard, we offer both synthetic and natural rubber, allowing us to tailor solutions to your unique needs. Our extensive range of rubber compounds are developed and mixed in-house. Our advanced laboratory assures 100% quality control and traceability. Hannecard also has a long tradition of developing high-performing silicone rubber solutions.

5.1.2 Polyurethane coating

Polyurethane generally has higher abrasion, cut and tear resistance than rubber, and better load-bearing capacity, particularly in high hardness. We offer an extensive MOCA free range of technical polyurethane coatings, including those with high temperature-resistant, acid-resistant and high dynamic properties.

Thanks to our state-of-the-art machinery, we can produce polyurethane coatings with the very best properties.

Specifications

Polyurethane coating		Rubber coating	
Hardness	5 to 70 P&J 10 shore A to 70 shore D	Hardness	0 to 200 P&J 5 shore A to 80 shore D
Heat resistance	up to 150 °C	Heat resistance	up to 250 °C
Available special properties	Antistatic Semi-conductive ESA-printing Acid resistant Constant roughness High dynamic properties Food-approved Improved web release	Available special properties	Antistatic Conductive High temperature Non-stick High abrasion resistance Good mechanical grip Food-approved Improved web release



● PU coating



● Rubber coating

5.1.3

Thermal spray coating

Hard coatings are used to extend the lifetimes of rollers working in extreme conditions. Thanks to our workshops in both Europe and USA, Hannecard offers a wide range of solutions and technologies for the most demanding industrial use requirements.

- Carbide coatings, applied by high-pressure HVOF and HVOF thermal spray
- Ceramic coatings
- Multilayer and combined metal coatings
- Arc spray, cold spray and combustion flame technologies for specific applications and roller repair

Our thermal spray coatings are widely used in the steel and food industry, paper mills, plastic film production and many other applications. Our services include precision grinding, roller repair and specific shapes on-demand. Hannecard coatings can offer long-lasting and environmentally friendly solutions for replacing conventional chrome plating (Cr(VI) is recognized as a substance of very high concern).

5.1.4

Composite coating

Hannecard has pioneered the use of new materials for both roll covering and roller technologies.

Composite materials, combining thermohardening resins with different types of reinforcement, have been developed in-house for more than 25 years. In addition to our composite roller cores and sleeves, we produce high-end covers for the paper, textile, plastic film and metal industries.

Our Diamantal®, Sirius, Centaur, Vega, and Titan covers are used in many paper mills for calendar, press and guide rolls.

The latest generation composite products offers higher hardness, improved impact resistance and lower surface roughness.

Specifications

Thermal spray coating

Hardness	Up to 1400 HV
Thickness	Up to 1 mm
Heat resistance	Up to 1150 °C
Surface finish (roughness)	0.05 to 25 µm
Available special properties	FDA-approved (food contact) Non-stick properties Improved abrasion resistance Improved corrosion resistance NiCr base layer technology

Composite coating

Hardness	80 to 92 Shore D
Heat resistance	Up to 170 °C
Surface finish (roughness)	Down to 0.3 µm
Available special properties	Improved release properties and doctoring Improved impact and shock resistance Improved load-bearing capacity



Thermal spray coating



Composite coating

5.2 Composite & Rubber Sleeves

Hannecard also offers a variety of custom-made sleeves that will enhance the quality of your products:

- Tapered & cylindrical sleeves for rotogravure, flexography, lamination and coating
- Applicator sleeves for metal packaging
- Elastic mandrel sleeves for the metal industry
- Custom-made roller sleeves



● Composite & rubber sleeves

5.3 Sanforizing Rubber Shrinking Belts & Clupak Blankets

5.3.1

Sanforizing rubber shrinking belts

Rollin® SD is our innovative rubber shrinking belt solution, created to shrink denim and heavy fabrics. It has been specially designed for use on Sanfor textile machines. Rollin® SD assures optimum shrinkage for even the most demanding fabrics.

Benefits & characteristics:

- Multi-layer structure
- Specially designed for severe working conditions
- Longer life between grindings
- improved mechanical resistance of the inner face (lower risk of abrasion and cracks)

5.3.2

Clupak blankets

Our '8000 series' rubber blankets, used in Clupak machine sections, allow the production of extensible paper.

Benefits & Characteristics:

- Superior crack resistance
- Excellent flexing & elongation characteristics
- Extended lifetime
- Optimal onsite grindability



● Sanforizing rubber shrinking belts

5.4 HandyCoat®

The patented beverage can coating system

Beverage canning is a massive industry. Humans across the globe use roughly 400 billion cans per year for their beverage consumption and that number increases every year.

Hannecard developed HandyCoat®, a revolutionary coating system for beverage cans, to meet the needs, requirements and increased production of the beverage can industry. Our unique system provides a quick and efficient method to apply coatings to aluminum cans, imparting significant time and cost savings.



● HandySleeve® + HandyBase



"Thanks to our experience and constant innovation, we make sure to always offer the best covering solution for your needs."

06 Services

Much more than coverings



Precision roller grinding



Full service for curved spreader rolls and deflection-controlled swimming rolls



Performance optimization and TCO reduction



Dynamic roller balancing up to 2.000 mm diameter, 12.000 mm length and 32 tons



Roller maintenance, dismantling and assembly



Laboratory analysis



Logistic and packaging: repair and manufacturing of transport crates



Roller engineering & custom-made OEM solutions



Roller cores in steel, stainless steel, aluminum and composite, available in lengths of up to 12 m and weights of 32 tons



Countroll®: roller management, measurement and monitoring

Managing documents can be time-consuming, so Hannecard recently invested in countroll®, an online management system especially developed for rollers which brings all your documents and roller info together digitally!

Hannecard is the first roller covering company who enables its customers to consult and manage all their roller documents digitally, including label data, inspection reports, technical data sheets, technical drawings, etc.

We can help you gain greater insight into your rollers and process line and optimize your production, thanks to our wireless countroll® sensors. When placed on rollers, our sensors continuously measure their movements and easily detect anomalies, analyze data and carry out diagnostics of the rollers.



**Hannecard HQ
Ninoofsesteenweg 589
9600 Ronse
Belgium**

**info@hannecard.com
www.hannecard.com**