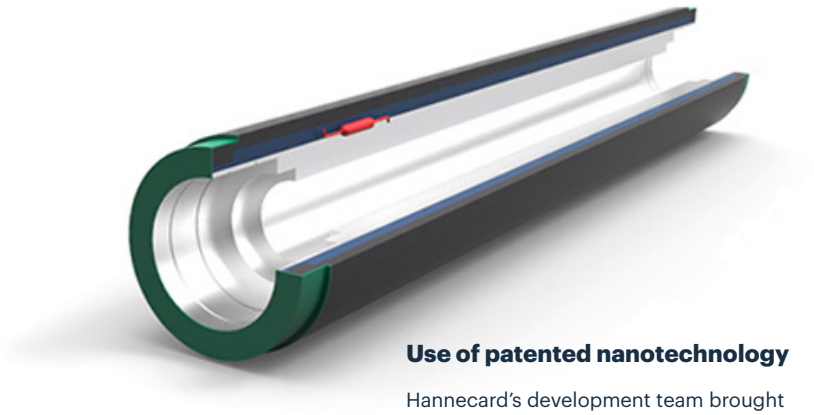
HANNECARD
YOUR ROLLER EXPERT

HANNEVISION & HANNERESIST:
NEXT GENERATION ROLLER & SLEEVE COVERINGS
FOR GRAVURE PRINTING WITH ELECTROSTATIC ASSIST

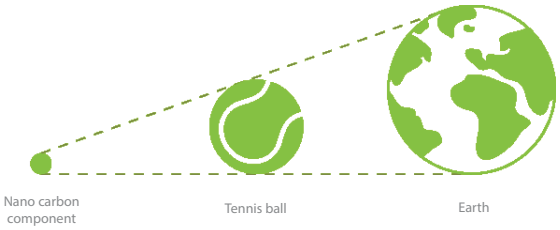
HanneVision is the patented solution for roller and sleeve coverings for décor printing with electrostatic assist (ESA) that combines polyurethane with nanotechnology.

HanneResist is the patented solution for roller and sleeve coverings for cardboard packaging with electrostatic assist (ESA) that combines polyurethane with nanotechnology.



Use of patented nanotechnology

Hannecard's development team brought together a wide range of specialists and engineers to create the ground-breading **ESA 2.0** solution.



The carbon nanotubes used in sleeves and roller coverings are 10,000 times smaller than the black carbon which is traditionally used. Thanks to these carbon nanotubes in the roller and sleeve coverings, a more homogeneous electric field is generated on the impression roll, eliminating missing dots from the ink transfer, from printing nip to the substrate.

Advantages of nanotechnology

1. Homogeneous electric field over the surface of pressure roll or sleeve.

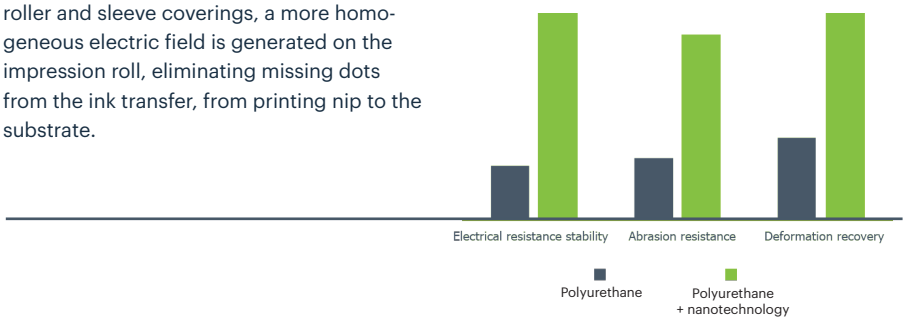
Because of its extremely small size the carbon nanotubes distribute the electric charge submitted to the impression roller more evenly over its surface.

2. Constant surface resistance over the time.

Thanks to their even distribution in the compound the surface resistance remains unchanged during a far longer time before regrinding compared to any other solution. In addition the sparkles free operations are secured.

3. Higher mechanical resistance.

The carbon gives reinforcement of the mechanical performance. Again thanks to its presence in the whole polyurethane the mechanical resistance is tremendously improved.



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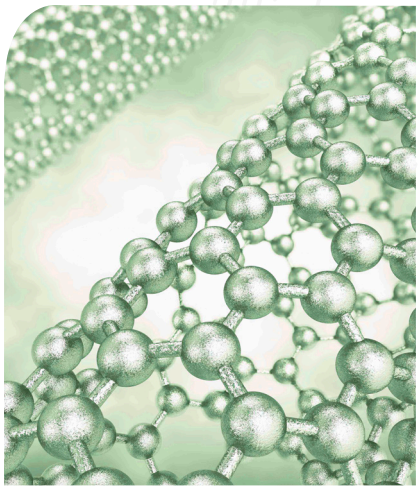

CHARACTERISTICS

- Patented nanotechnology
- The only solution on the market using polyurethane with carbon nanoparticles
- Approved for all major ESA manufacturers: Eltex, Enulec and Spengler
- Complies with all electrostatic assist systems: top loading, direct charge (core charging) and side loading
- For solvent-based inks
- For sleeve and roller coverings in 70 Shore A, 80 Shore A and 90 Shore A

Our advantages

More precise printing, faster set-up and cost savings are the key benefits offered by Hannecard's next generation patented electrostatic assist (ESA) roller and sleeve coverings The ESA 2.0 roller and sleeve covering solution features a proprietary new process that combines nanotechnology and polyurethane.

Superior printing quality

Introducing nanotechnology in polyurethane rollers offers more constant electrical resistance values throughout the complete surface of the roller. Difference in surface resistance from left to right is tremendously reduced, offering even attraction of ink on the printed medium. This allows you to meet stringent ESA printing specifications more easily – and even go beyond them. The result: superior printing quality, even on low-quality substrates, quicker set-up of your ESA system and shorter start-up runs with less waste.

Higher press speeds

Use of polyurethane combined with carbon nanotubes reduces the heat build-up in the press during operations. Improved heat dissipation makes your ESA system more robust, allowing for higher press speeds, printing more in the same time while ensuring point-to-point print accuracy, even on lower-quality substrates.

Improved safety

Excessive charges in ESA systems may jeopardize your operations.
ESA 2.0 constant electrical resistance values allow you to generate the necessary electrostatic field within the desired range with less power. This reduce the risk of sparks, keeps your system from shutting down preventively or initiating your fire safety system to prevent damage to your facilities.

Longer covering lifetime, less maintenance

ESA 2.0 mechanical performance exceeds that of its predecessors.
Abrasion resistance is improved by 10 to 20%, resulting in longer time before regrinding. The use of nanotechnology improves the deformation recovery of the roller by 20 to 25%, decreasing maintenance cost and downtime for changing the impression rollers in your ESA system.

Reduced costs

Using ESA 2.0 reduces maintenance times and reduces your energy consumption:

- Easier and faster to set when starting a new print job
- Superior abrasion resistance and excellent deformation recovery: saving in stops and organization
- Better resistance to water and solvent-based gravure printing inks: easy to clean
- Lower electrostatic assist power level results in savings in electricity costs: use of ESA at lower power levels for the same result

NEED MORE INFORMATION?

For more information about Hannecard or our products, please contact a Hannecard site near you or visit our website at : **www.hannecard.com**