

EKatex® is a Antiwear Coating for the Open-End- and Ring-Spinning Textile Industry.



Combing wire with EKatex® antiwear coating

The textile industry has a long tradition of antiwear coatings and this has become a distinguishing feature. Increasing and standardizing yarn quality are important value levers for the spinning sector. ESK's mechanical and plant engineers are ongoing partners to the open-end and ring spinning textile industry, offering exclusive solutions tailored to requirements.

# **Properties**

- Homogenity of inclusions
- Dimensional accuracy of the coating thickness
- Retaining the contour of the substrate
- · Reproducibility of the coating
- Tracing of batches
- Extremely short lead times
- · Delivery reliability

ESK does not process chromium-containing systems, which can be hazardous to health. The alternative tried-and-tested binary alloys with incorporated substances can provide tribological properties that are identical, or even superior to such systems.

#### Competitive Advantages thanks to Exklusive Coatings

ESK offers complete or partial coating of components or combing wires with EKatex® electroless nickel dispersions with the controlled incorporation of inorganic hard particles or organic substances. Selection of the incorporated substances for particular applications is one of ESK's core competences as a result of its extensive experience in grain manufacturing, fractionating and classification. The specified properties are continuously monitored and the processes certified.

#### Innovative Tribological Systems for Processing Abrasive Yarns

The growth in the processing of abrasive yarns creates new demands on existing tribological systems. ESK supports customers by the applications-specific improvement of its tribological systems. In this, we take advantage of our own ESK development department, the many years of experience of our partners and our comprehensively equipped central lab.

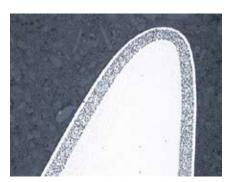


### Coated products "Open-End-Spinning"

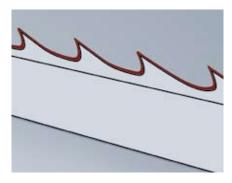
Combing wire, opening rollers, rotor cups, rotor shafts



Rotor shaft with rotor cup (left) and opening roller (right)



Cross section of the wire tooth with EKatex® antiwear



Scheme of EKatex® coated combing wire (red marked) - mikrometer scale

## Coated products "Ring-Spinning"

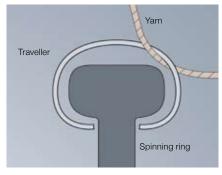
Spinning rings, travellers



Travellers in different sizes and forms



Spinning ring plus traveller



Principle of ring spinning wih spinning ring, traveller and yarn

## Layer of EKatex® electroless Nickel dispersion



SEM image of EKatex® coating - electroless Nickel diamond dispersion (2  $\mu\text{m})$ 



Cross section of EKatex® coating - electroless Nickel diamond dispersion (2  $\mu m)$ 

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001, DIN EN ISO 14001. EKatex® is a registered trademark of ESK Ceramics GmbH & Co. KG

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