

# NON-STICK COATINGS REDUCE PRODUCTION DOWNTIME

Even under cleanest conditions processing residues like micro particles and dust may settle on manufacturing equipment. Subsequent cleaning minimizes the risk of cross-contamination and guarantees quality but leads to high costs and causes downtimes. Furthermore, valuable material may be lost during the production process.

To address such issues, Fraunhofer ISC offers a tool box solution with special non-stick lacquers adaptable to specific customer requirements. The coatings show excellent non-stick properties and can be easily applied to production equipment.

## Advantages of the non-stick coating

- Tool box solution for coating of different substrates like glass, ceramics, metal and some plastics
- Easy application by conventional lacquer coating technologies (e. g. dipping, spraying) with subsequent thermal curing
- Surface remains almost unchanged as the layer thickness is far below 1 µm
- Special structure prevents sticking of particles and dust to surfaces (similar to lotus effect)
- Applicable for heterogeneous and homogeneous processing dusts
- Coating is non-fluoride, temperature-resistant, food-safe and durable
- Upgrading of single components of existing plants
- Low-cost endowment of new production plants before assembly with minimal material consumption

## Examples of previous applications

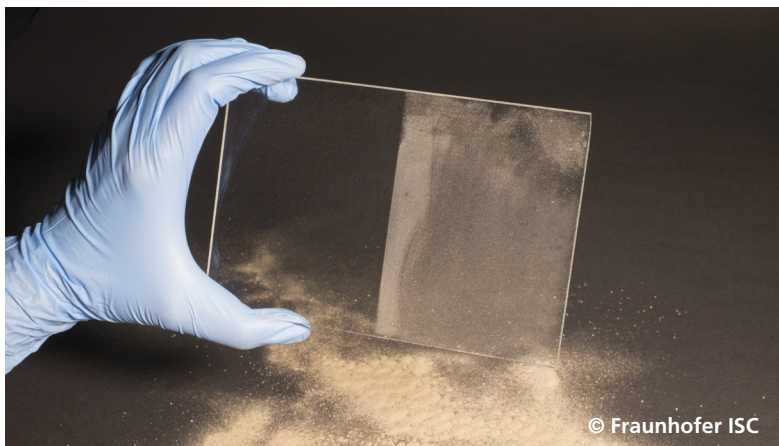
- 15-year long-term tests of anti-dust coating on glass, e. g. for windows of Cologne Cathedral
- Field tests in desert regions of anti-soiling protection for PV-glass
- Testing of coatings with non-stick effect for printing ink production

## Possible applications

- Food processing
- Pharmaceuticals
- Printing ink production
- Architectural glazing
- Solar panels and photovoltaic plants
- Filling and packaging

## Cooperation with Fraunhofer ISC

We test the application of different coatings for customer specific problems, adapt lacquer compositions and support customers with the technology transfer into manufacturing processes.



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