

## Preview IST - International Surface Technology 02.2024

### FOCUS | AUTOMOTIVE AND MOBILITY

#### Sustainable paint shop for electric vehicle manufacturer

A Chinese electric vehicle manufacturer is focussing on sustainable production processes and had its new paint shop equipped by a German machine and plant manufacturer to save energy and resources. The system and exhaust air purification technology, including software, was installed in just nine months after the order was received.

#### Rotary immersion system for commercial vehicles

An immersion system that has been further developed for higher payloads is to provide a premium manufacturer of commercial vehicles with greater flexibility in pre-treatment and cataphoretic dip coating.

### INDUSTRY

#### Changes in the variety of colours in the automotive industry

Every year, the designers of the Coatings division of a chemical company create a new colour collection to inspire automotive designers worldwide. While analysing the colour trends for 2023 to 2024, the designers realised that the classic automotive colours were in urgent need of a facelift.

### POWDER COATING

#### Curing powder coatings quickly and energy-efficiently

Curing or hardening is a key step in powder coating that costs time and energy. A laser is an efficient alternative to conventional processes such as convection ovens and IR lamps and promises advantages.

#### Dates

Advertising deadline: 04/24/2024

Copy deadline: 04/30/2024

Publication date: 05/27/2024

### FUNCTIONAL SURFACES

#### Intelligent surfaces integrated into the component

Smart components are being used more and more in our everyday lives. A research project for wireless contacting opens up new possibilities for the advancing miniaturisation in the field of electrical engineering with a special injection moulding process.

### WET COATING

#### Insulating coating of battery cells instead of foiling

For reliable and efficient electrical insulation, battery cells are given a protective coating instead of a film coating in a new process. In addition, ultra-fine cleaning of the bare battery cell ensures that the coating adheres completely and without gaps. A fully automated system is used here, which enables a continuous contactless coating process of the battery cells with UV coating.

**New system increases productivity**  
A premium manufacturer of audio technology was experiencing a sharp rise in demand for its products. Following a capacity analysis, the company decided to invest in a large wood processing centre with integrated surface coating. The system was successfully put into operation after a short installation period.

### PARTS CLEANING

**Economical cleaning with the right filter**  
Numerous parameters such as temperature, water pressure, cleaning agent and cleaning process determine whether a system is optimised for the parts to be cleaned and achieves the required level of cleanliness. The aim is to make the process as economical as possible. Considerable savings potential lies dormant in a parameter that is often underestimated: the choice of the right filter for the filtration unit.

### COATING

#### Adjusting screws for more sustainability in e-coating

The e-coating industry wants to become greener, and there are various starting points. This article presents four specific measures aimed at making processes and coating more environmentally and climate-friendly.

### MEASURING AND TESTING

#### Non-destructive testing of plastic coatings

Photothermal coating thickness measurement is a non-contact process for paints, powder coatings and glazes on a wide variety of substrates. The different thermal properties of the coating and substrate are utilised to determine the coating thickness. Three application examples show the advantages of this method.

#### Contact



Maximilian Fuchs  
Sales Management  
+49 (0) 611.7878 146  
maximilian.fuchs(at)springernature.com