



EcoPaintJet

Automated and Overspray-Free Two-Tone Painting with High Edge Definition

To stand out from the crowd, buyers of new cars often order a contrasting color for the roof or they ask for decorative stripes. Currently, after the first coat is applied and cured, the factory associates must cover the previously painted body surface so it is not contaminated by the $2^{\rm nd}$ contrasting color which will be applied to the roof. In addition the workers must mask off the outer edge of the roof lines to establish a sharp edge when paint is applied. The same technique is used for decorative stripes. This process is not only time consuming but also creates substantial waste in form of paper, plastic, paint, and solvent.

The **Eco**PaintJet process offers a solution whereby the paint applicator no longer creates overspray and eliminates the need for masking to obtain sharp edges.

The **Eco**PaintJet nozzles apply material very closely over the car body surface and work so accurately that even the tiniest paint droplets land in precisely the right place. This enables color stripes to be applied exactly side by side and with sharp edges – and the result is faster, cleaner and more economical than ever before.

HIGHLIGHTS



Application with high edge definition

100% transfer efficiency – no overspray

No masking required

Two-tone painting

2K compatible

Suitable for color change

Technical Features

EcoPaintJet

AUTOMATION CONCEPT

- 100 % transfer efficiency no overspray
- Integration into the top coat process possible
- Suitable only for solid colors (no metallic paints)
- Alternatively: Application on baked clear coat
- Stop & go station
- Painting robots with complete functionality for paint application, such as dosing pump and color change
- Jet inspection, applicator cleaner
- Highly accurate, two-stage measuring system for the compensation of body and positioning tolerances

POSSIBLE PROCESS LAYOUTS

- Offline two-tone process after standard top coat process with monocoat
 - Separate, robust painting process on cured clear coat
 - Flexible positioning in the paint shop layout possible
- Offline two-tone process after intermediate drying with waterborne decorative coat
 - Cycle time for decor process independent from topcoat line



Due to the complex requirements on painting paths and the dynamic positioning of the applicator, robot pathes are created by software solution

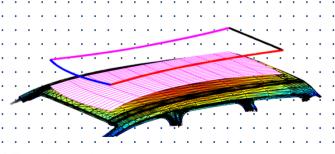
- Offline path generation
 - 3D body data
 - Path generation
 - Specifications for robot paths
- Online path correction
 - Detection of the body position
 - · Detection of the roof edges
 - Correction of the robot path data
 - Application



CONTACT

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Offline path generation