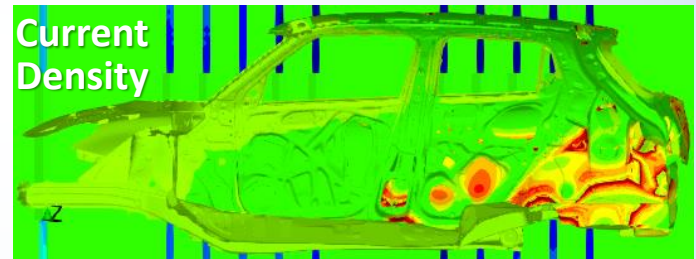# Electrodeposition Simulator
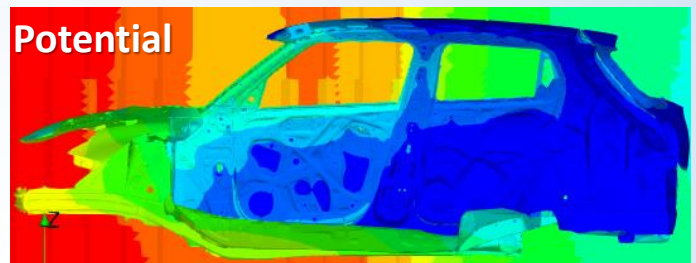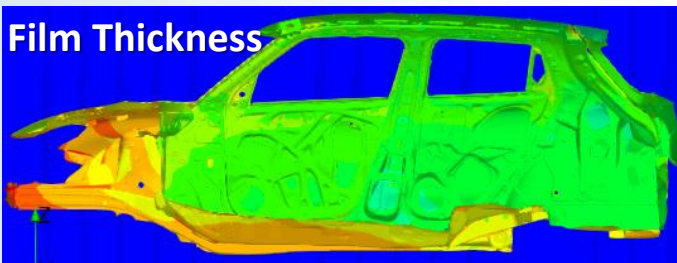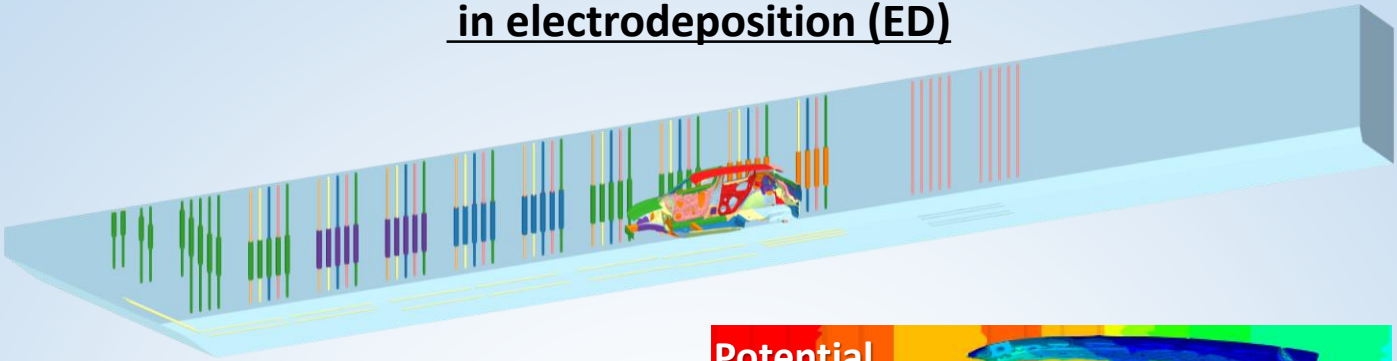# EDESFEM

Numerical prediction of film thickness, potential, and current density in electrodeposition (ED)

Film Thickness

Potential

Current Density

Applications

- ■ Optimization of ED hole layout and ED conditions in vehicle design
- ■ Pre-study of the effect of ED condition changes on film thickness
- ■ Cause finding and quick improvement of insufficient deposition, etc.

Features

- ☐ Specialized for **actual line ED** in auto manufacturing
- ☐ Support for **moving boundary** analysis of multiple bodies
- ☐ Faithful reproduction of **deposition delay on inner plates**
- ☐ Good convergence under **highly nonlinear** cathodic BCs
- ☐ **High speed** w/ the MPI/OpenMP hybrid parallelization
- ☐ **High accuracy** w/ the next-gen FEM, "ES-FEM" (industry's first)

Inquiry: https://edes.fem.jp   edesfem@rccm.co.jp

Notes:
- ● Paint property measurement tests are required, apart from the simulator.
- ● A tetrahedral meshing software (the "pre") is required, in addition to the simulator.
- ● The free software "ParaView" (the "post") is used for visualization.