

Paint Application Solution

The Paint Application Solution uses the CSR software and automatically generates robot painting paths and provides a variety of tools to simulate and verify paint coverage, taking the guesswork out of the robotic painting process. Using the CAD geometry of the part to be painted, the Paint Application Solution automatically creates a painting path contoured to fit the analytic surface of the part.

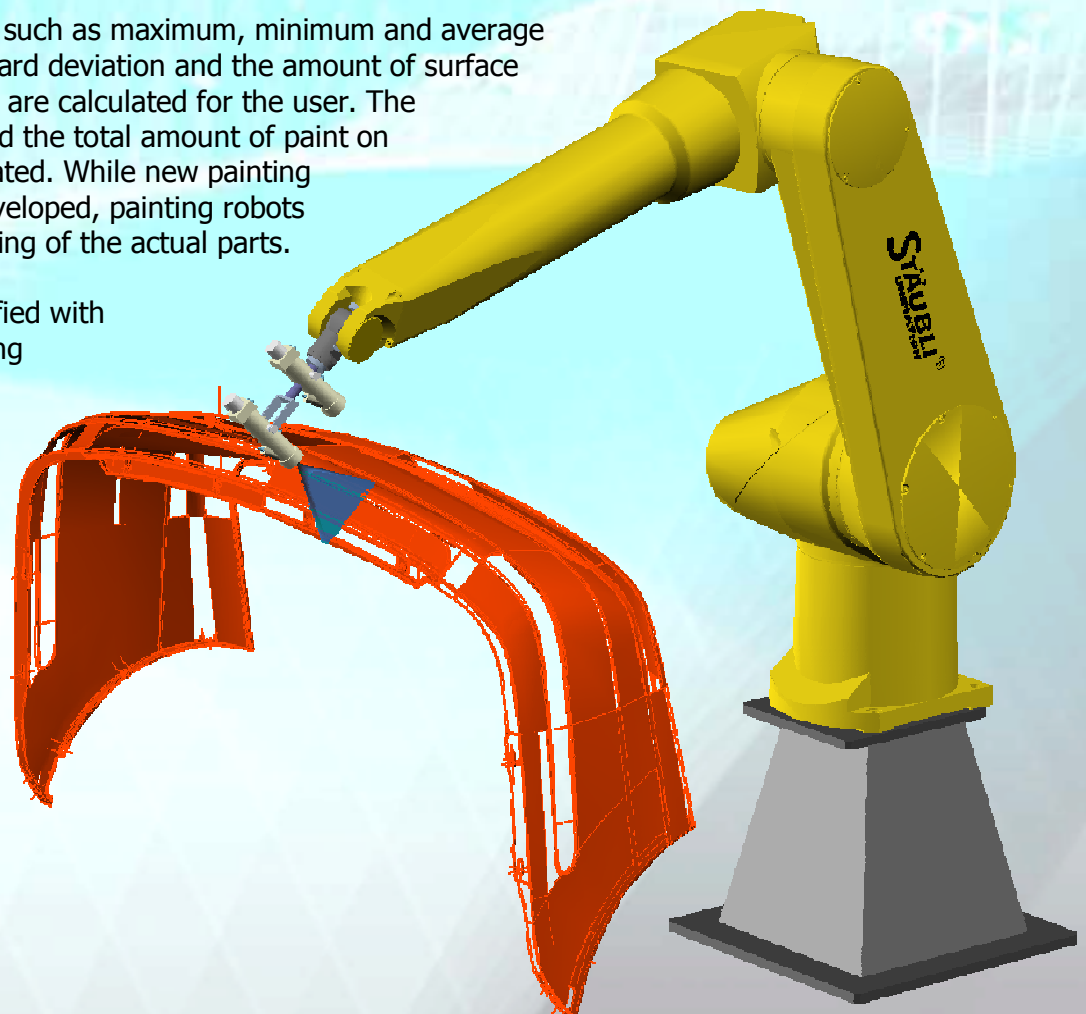
Easy Set Up

Once a path has been generated, painting programmers can experiment with robot acceleration, blend, dwell time and motion type, and with paint parameters such as plume shape, pressure or flow to achieve optimal paint coverage.

Users can simulate a proposed painting task to visualize and analyze paint coverage by displaying a colour map which identifies varying degrees of paint thickness. Each colour is assigned a range of thickness by the user. These ranges can be changed and the part redisplayed without repainting.

Statistical parameters such as maximum, minimum and average paint thickness, standard deviation and the amount of surface painted at each range are calculated for the user. The total paint sprayed and the total amount of paint on the part is also calculated. While new painting routines are being developed, painting robots are available for painting of the actual parts.

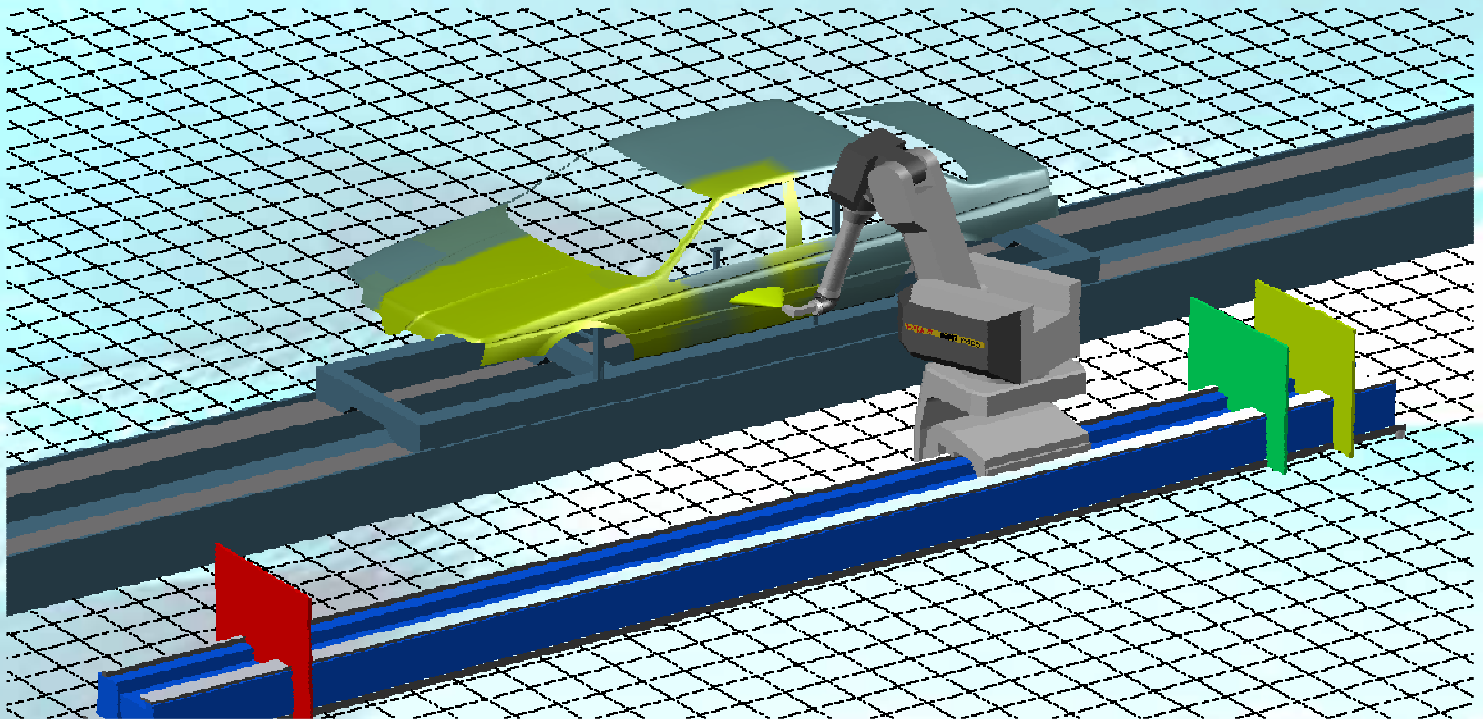
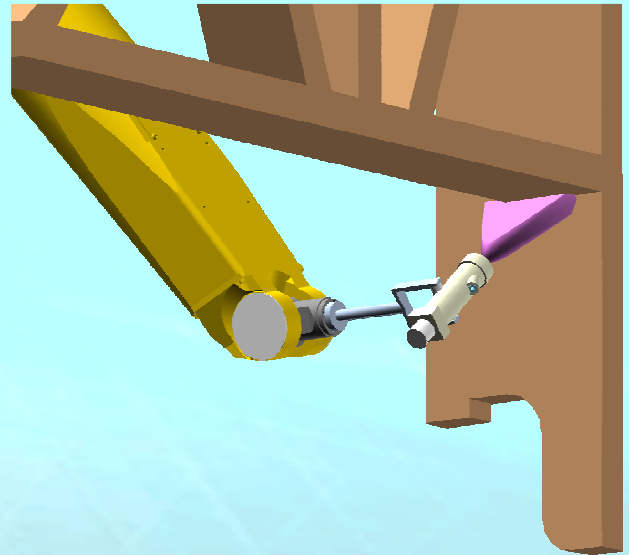
Once the user is satisfied with the results of a painting simulation, the program can be automatically translated into the target robot's native language for downloading on the factory floor.



When combined with the calibration facilities in CimStation Robotics (CSR), the Paint Application Solution (PAS) is a powerful tool for off-line program generation. Users of CSR Paint Application Solution can benefit from shorter design-to-manufacturing cycles, reduced robot down-time and superior product quality.

The Paint Application Solution is an application module of CimStation Robotics and requires CSR installed to function. CSR contains many additional robot simulation functions. PAS is one application module, others available include;

- Spot-Weld
- Assembly
- Arc-Weld
- Polishing
- Press/Stamp
- Riveting



Introduction to AC&E

AC&E has been applying simulation technologies to a wide range of design and manufacturing applications found in aerospace, automotive, defence, power, polymer and other engineering organisations. Our manufacturing simulation software provides easy and accurate access to preparing and verifying (often) complex programmes for specialist equipment, robots and other expensive machines. For more information, please contact us as shown below.

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