

### Fast Cell Layout and Simulation

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With a few user input parameters, fully functional generic cell peripheral models can be quickly created, allowing workcells to be mocked-up very quickly. Wiring and monitoring of the workcell digital I/O is intuitive and easy with the point-and-drag graphical wiring interface.

### Accurate Cycle Times

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Using accurate virtual models of Adept/Staubli robots and linear modules, you can determine and optimize cycle and robot settling times as well as check their dynamic motor saturation limits. Accurate cycle times are critically important, especially when used for a production line optimization wiring interface.

### Part Throughput

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From the statistical simulation results displayed in Gantt charts and timing reports, bottlenecks and other inefficiencies can be found, leading to corrective action. Since part physics is also simulated, flexible feeding and vision-guided robotic cells can be accurately represented.

### Optimize Cell Design

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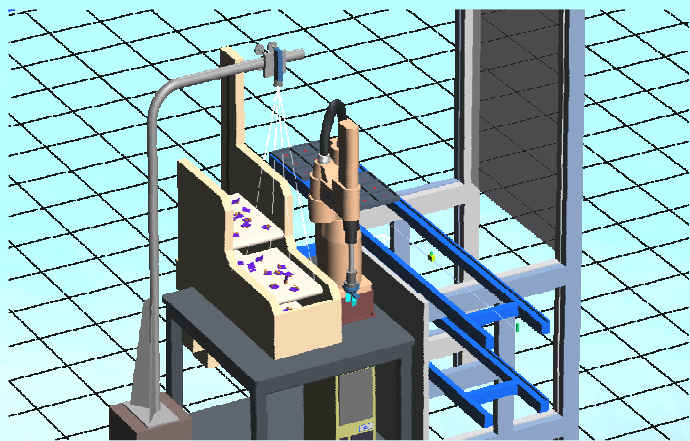
Automatically place robots to minimize cycle times based on the robot's program and corresponding defined locations. Also identify and highlight collisions and near misses automatically during program execution to aid in finding the optimal robot and peripheral placements.

### Create Powerful Visual Presentations

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Enhance presentations with easily created, visually rich movies (2D AVI or interactive 3D AC&E format) of the cell simulation. Displayable on Windows or UNIX platforms they are perfect for improving communication and understanding of your process, especially to potential customers.

## Feasibility to detailed workcell simulations



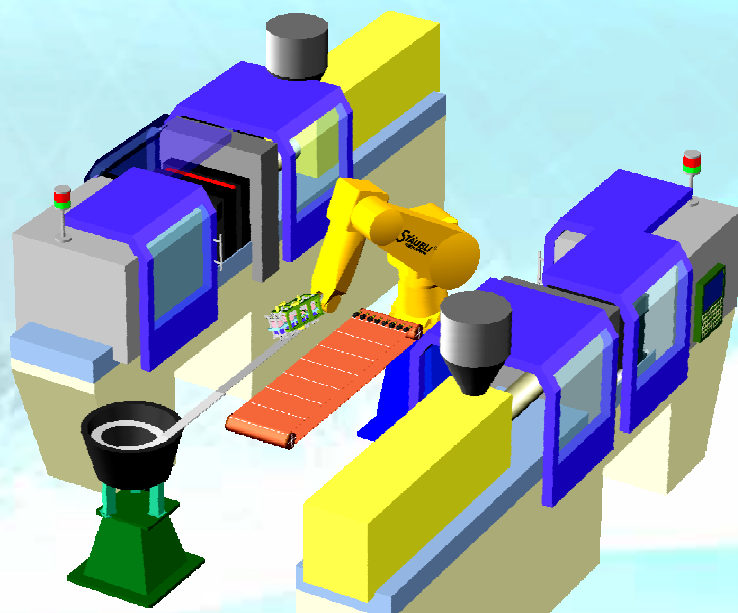
E-Hub Assembly allows users to create and program robotic workcells for small part assembly, electromechanical assembly, pick & place and material handling applications.

E-Hub Assembly can determine application feasibility and accurately calculate cycle times that can then be automatically uploaded onto a line optimization system to improve production throughput.

Using easy-to-use parametric technology, E-Hub Assembly quickly creates common factory peripherals such as grippers, conveyors, sensors, indexing tables, feeders, and pallets. Simply define a few dimensional and kinematic parameters to create these virtual workcell components. Avoid time consuming CAD modelling, and model workcells in just a fraction of the time required by other simulators.

E-Hub Assembly also incorporates a standard library of Adept/Staubli kinematically accurate robots and mechanisms, as well as more than 150 non-Adept/Staubli robot models to ensure that a wide variety of automation cells can be quickly modelled and designers can create general user-defined tools for workcells requiring special or unique tooling.

Also included for maximum flexibility, is the ability to create fully functional, custom robot mechanisms. With E-Hub Assembly, you will answer your cycle time and feasibility questions - all while visualizing the execution of the entire workcell in a dynamic, 3D graphical environment.



## 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.

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