

# PacSi



## The PacSi simulation system

Packaging machines are some of the most sophisticated machines there are in machine manufacturing, because they are usually highly specialised systems and make rigorous demands on speed, performance and process reliability. These challenges call for tailor-made solutions from the mechanical engineer in which he must develop new solutions to specifically suit the customer's needs and at the same time make promises regarding the performance of his product.



Here, dynamic simulation of material flow is a proven and recognised means of determining performance parameters and optimising the kind of interconnected systems that are commonly to be found in the packaging industry. With it, the kind machine performance that is required and buffer sizes can be determined in advance without risk.

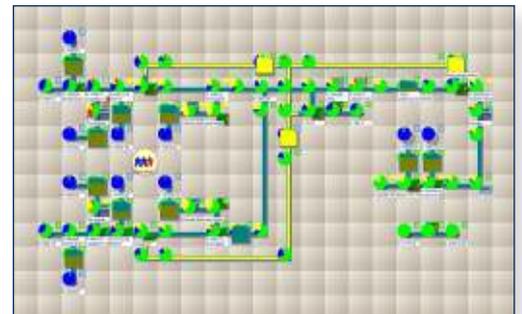
PacSi is a tool that was developed and optimised specifically for this highly dynamic and high performance field. As opposed to many other products, PacSi makes use of a discrete time approach for the simulation of such plants, so it can provide answers faster and run through a multitude of critical scenarios in minutes, instead of hours.

### Special features of PacSi

#### Line structure and efficiency

Takes into account:

- Machines
- Interconnected elements
- The number of operators
- Manual packing



PacSi model of a line for filling and packing baby food with a carrier circulation system, including analysis of weak points

#### Detailed operator strategy

Takes into account:

- Operator position
- Transit times
- Priorities of the activity

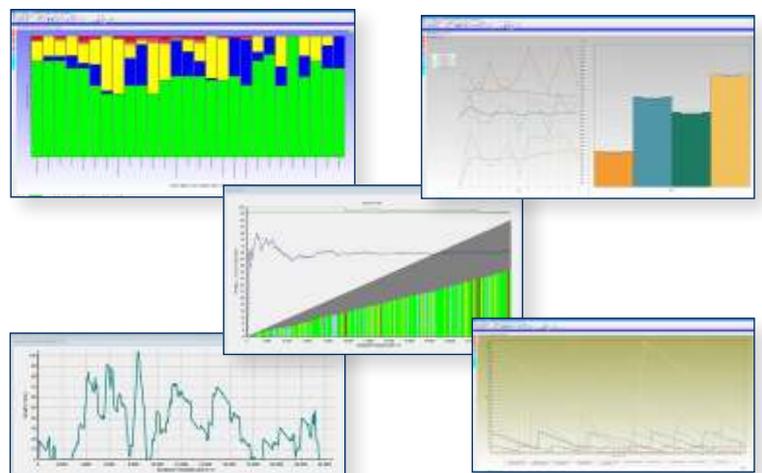
Distinction between:

- ✓ operator activity and
- ✓ Rectification of malfunctions

#### Production optimisation

Takes into account:

- Layout variants
- Line performance
- Malfunction behaviour
- Changeover time matrix
- Job size
- Planning scenarios
- Delivery deadline



PacSi offers a multitude of different evaluation methods

## Application areas of PacSi

- Generation of elements (e.g. conveyor technology, production and packaging machines, robots, buffer systems)
- Use of the elements to form any kind of interconnected line
- Simulation of the process behaviour
- Simulation of operator behaviour
- Evaluation according to criteria such as output, availability and degree of efficiency of the individual components and the line as a whole
- 2D depiction of the model with visualisation of the element states (operation, bottlenecks, defects, malfunctions) and the production flow
- Portrayal of the evaluation in diverse ways

### The SimPlan group

We consider ourselves to be a cross-sector full-range supplier with regard to simulation, accompanying you with extensive know-how, experience and modern methods in the optimisation of business processes.

Our services range from process analysis and consulting through material flow and logistics simulation, simulation-based detailed production planning to support with the commissioning of control software.

Furthermore we are a neutral distributor of simulation software and we will lend you our support with the selection, training and implementation in your company.

### Why SimPlan?

- Objective and independent analysis
- Detailed knowledge of logistics and production processes with over 25 years project experience
  - Development and use of standards
  - More than 350 person-years experience in the field of simulation
- Sufficient capacities for prompt respond to your questions
- Close cooperation and project integration with high on-site quota
- Development of innovative solutions

## Where to find us

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