Reduce development risk and start-up time with the Real World Simulation Package of KeMotion Packaging. This unique tool set allows designing, optimizing, validating and visualizing multi-robot pick & place lines before the machine design is finalized.

Important requirements for robotic pick & place applications are easily fulfilled with ready-to-use packaging solutions from KEBA:

- Maximum performance (picks/min, …)
- Use as few robots as possible
- Pick all products from the conveyor
- Fill all boxes completely

At the same time, flexibility is maintained for changing conditions such as:

- Single and multiple layer product placement
- Balancing product fluctuations on the in-feed belt

A complex initial situation

Robot concepts which may be technically possible, often can’t be realized using traditional planning and design tools. The system configuration and high number of variables that must be considered simply becomes too complex. Multi-robot solutions only add to this complexity.

At the same time, detailed understanding of system performance in the concept phase helps to provide a clear understanding of the ROI, and makes it possible to optimize the system before it is built.

The easy and fast solution

The Real World Simulation Package of KeMotion Packaging precisely simulates the planned machine and offers completely new possibilities:

- The simulation is represented by actual application code running on the real controller
- Simulation of robot behavior is highly accurate, by using a complex model of the real robot including dynamics and physical properties
- Fluctuations in product feeding and vacuum gripper times can also be simulated and considered

The Real World Simulation Package allows to create a highly accurate clone of the real system. Therefore the configuration and application code generated for the simulation can be used in the real system without any changes.
The Real World Simulation Package offers many possibilities for optimizing the system before building and starting up real machines. Many ready-to-use, user-friendly function options are available to achieve the desired productivity.

**Control the speed of the place belt**

Intelligent control of place belt speed warrants picking up all products and completely filling all boxes.

**Optimize positions and orientation of the robots**

Improve maximum performance and balance the stress on all three main-axes by optimizing the positions and orientation of the robots.

**Identify the ideal pick & place strategy**

Noticeable time savings in starting up the real machine by easily testing and developing the optimized pick & place strategy in a true-to-life simulation.

**Automatically generate the real robot working area**

Space-optimize machine design with best utilization of working areas and optimized arrangement of the robots.

**Optimize size and position of the pick & place area**

Shorter path-distances and therefore higher pick-rates and lower energy consumption thanks to Intelligent Motion.

**Dimensioning the drives and motors adapted to the particular application**

Best reliability and availability provided by precise dimensioning of the system.