

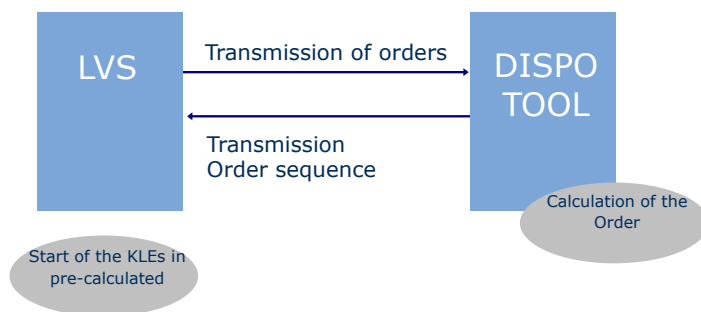
Initial situation

In addition to high system performance, the goal of efficient system scheduling is above all an equal utilisation of picking areas and packing plants. When creating a high-performance picking strategy, the focus is also on short throughput times and the cohesion of consignment parts while maintaining a high degree of flexibility.

The dispatch time as an essential criterion for prioritising picking orders does not usually lead to equal plant utilisation. Only when all plant areas affected by an order are taken into account when determining the order sequence can they also be optimally utilised in terms of technology and personnel. The scheduling tool in the plant control centre takes into account the areas from order start to picking zones, consolidation to packing and loading while maintaining order cohesion and adherence to specific departure times.

By creating a simulation model and then conducting experiments with existing WMS data, the parameters for configuring the dispo tool can be determined for an existing or planned one and the potential for optimisation can be determined. As a side effect, weak points and bottlenecks are also revealed that would otherwise only come to light in lengthy and costly tests.

The „Dispotool“ control centre application



Task of the Dispotool

- to transfer the picking orders (trays) to the dispatch tool after they have been released by the host and reserved in the existing WMS,
- to suggest the distribution of personnel on the basis of the known orders,
- calculate a favourable tray start sequence in the dispatch tool, and
- send it back from the dispatch tool to the WMS.

Basic function Dispotool

Functions of the Dispotool

- Presentation and analysis of the plannable order load
 - Staff scheduling (automatic and manual)
 - Calculation of bottleneck areas
 - Creation of a daily performance profile
- Order planning / scheduling run
 - Splitting shipments into batches
- Macros
 - Benutzerschnittstellen für Ausführung von SQL-Anweisungen Simulationsanbindung
 - Prognose über Utilisation, operating time, throughput, buffer filling levels, etc.
 - Reaction of the control centre, rejection of the old scheduling + rescheduling under parameter variation



User interface of the Dispotool

Goals and benefits

- Consistent plant and personnel utilisation
- Shorter consignment throughput times, since the parts of the consignment are kept together
- No overflow of consolidation and packing areas
- flexibility remains guaranteed - at anytime special promotions possible

Reference project

WMF AG logistics centre in Geislingen

- Creation of a detailed simulation model (bottleneck analysis, technical extensions)
- Experiments on strategic modification (order dispatching, item placement)
- Development of the dispatch tool
- Implementation in the plant control centre



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- Objective and independent analysis
- Detailed knowledge in logistics and production from over 30 years of project work
 - Development and use of standards
 - Permanent advancement of simulation topics through research and development

- Excellent resources to respond quickly to your issues
- Close collaboration and project integration with a high level of on-site involvement
- Development of innovative solutions for the efficient handling of problems
- Neutral distributor for simulation software
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Feel free to contact us

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