The Center of Excellence Logistics and IT

The CASTN transfer project is part of the Center of Excellence Logistics and IT, an initiative of the Fraunhofer-Gesellschaft. The Center of Excellence is funded by the state of North Rhine-Westphalia and the Fraunhofer-Gesellschaft and supported by research projects with industry participation. The aim is to expand the existing research and development center for logistics and IT at the Dortmund location into a world-leading center with partners from industry and science.



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Arrange a free initial consultation now!







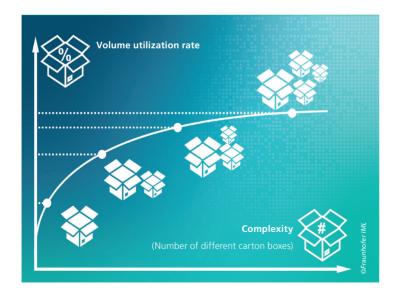
About the project



E-commerce is subject to constant change. Current trends and seasonal fluctuations influence the article and order structure in the mail-order business. With the increasing variety of products and the varying order structure, the range of shipping cartons also grows over time. Although the available packaging is becoming more and more diverse, the volume utilization rate often decreases. This is mainly due to the fact that packaging is not adapted to the changing requirements (e.g. dimensions, weight) of the products.

The optimization software CASTN (Carton Set Optimization) offers a remedy by determining a customer-specific trade-off between the number of cartons and the achieved volume utilization. The calculation is made on the basis of the article and order structure, the existing packaging spectrum and use-case-specific conditions. This results in an optimized carton set for the customer, including relevant key figures and visualizations.

Optimize your carton set



What are the customer benefits?

The project is directed at shipping companies/ mail-order bunisesses with:

- Heterogeneous article spectrum/ heterogeneous shipping structure
- High packaging complexity and historically grown packaging spectra
- High packaging costs and High procurement costs

An efficiency-optimized carton set:

- reduces the use of packaging and filling materials
- optimizes your material holding and provisioning effort.
- reduces your packaging and transport costs
- reduces CO₂ emissions
- ensures greater sustainability and efficiency through avoidance

Our services

Status quo:
Determining the volume
utilization of
your carton set

Analysis:

Evaluation of the composition of your carton set

${\bf Optimization:}$

Calculation of a volume-optimized carton set

Advice:

When putting together your new, individual carton set