

## Modeling and Visualizing Processes

e1ns.flow is a central tool in the process planning phase. Manufacturing and assembly processes are developed parallel to the development of the product. They are used as a basis for planning and calculating projects and for project meetings with customers.

With e1ns.flow you create and model processes graphically. A process can be divided into any number of subprocesses, thus allowing you to describe the entire process chain in detail. All process elements and links are automatically transferred by e1ns.flow to a system structure that is used as a basis for additional activities in the product development process. Additional development steps create a network between the process structure and the product structure so that a common system representation is generated.

The visual representation of the process makes it easier for everyone involved to access product information, and therefore enables networked cooperation between different corporate divisions and departments.

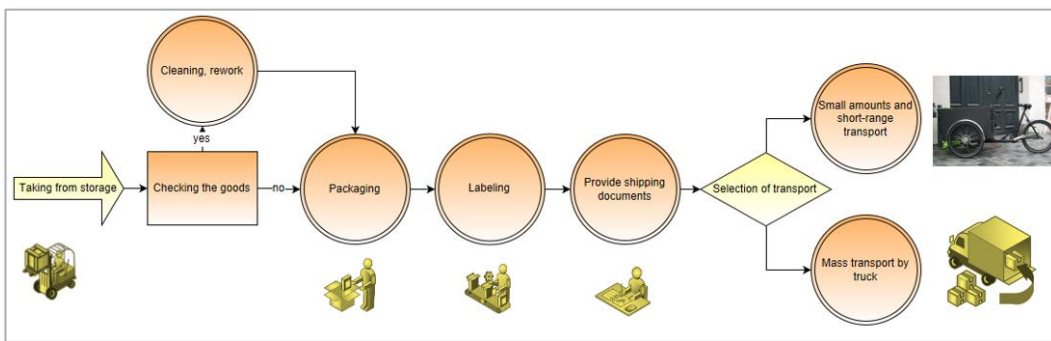


Fig.: The process is modeled and visualized.

## Applications and Use

- Designing and modeling processes visually
- Planning manufacturing and assembly processes
- Supplies input to the quality planning process
- Basis for the identification of faults and potential optimizations
- Supplies data for FMEAs and control plans
- Verification documentation for customers
- Use as a central process document for projects, customers, and engineering staff

## Branches and Standards

- IATF 16949 and AIAG recommend the creation of process flow charts
- Documentation for the Production Part Approval Process (PPAP)
- FAO/WHO HACCP standard (ALINORM 97/13A, Appendix II)
- DIN 10503 (Food hygiene)

## Primary Focus and Functions

### Integration in the Product Development Process (PDP)

- The process flow chart is needed early in the design phase of a new product.
- The processes modeled are automatically converted to a tree structure.
- The tree is used as the main process representation to conduct further analyses: specification of the process characteristics, risk analysis, control plan, etc.

### Modeling processes

- Standard forms are provided for process steps.
- Additional forms are available for the purpose of illustration and entering comments.
- Images and photos are integrated directly into the worksheets.
- If necessary, custom templates can be implemented for different corporate divisions / manufacturing processes.
- New process steps can be created or existing processes can be integrated into a process flow.

### Easy to use

- Simple, intuitive operation in a web browser.
- The graphic interface displays all elements of a process.
- Elements are created to build a process or existing elements are simply dragged into the interface and dropped at the desired location.
- A process can be divided into any number of levels (additional worksheets).
- Process steps are linked to each other to describe the process flow.
- Connections between process steps can have properties (e.g. Decision: yes/no).

## Your Benefits

### Time and cost savings:

- Different areas work with a common process and system representation
- The most recent data is always available
- Repeated tasks are avoided and maintenance is minimized
- Quick introduction to process modeling, uncomplicated operation
- Accessible via web browser; a local installation is not necessary