

## EXAPTplus Nesting with NESTEX

NESTEX covers the requirements relating to nesting planning for the machining processes flame cutting, water-jet cutting, lasering and plasma arc cutting. The system can be used to carry out dynamic nesting for the most diverse cutting plans and various materials, such as metal, plastics, textiles, wood, etc. on the most diverse semi-finished products, such as plates, residual pieces, etc.

NESTEX can be run in different extension levels as stand-alone or in combination with an order planning via the organisation of manufacturing data FDO (supplementary module of EXAPTpdo).

The user benefits in particular from the following advantages:

- high planning efficiency and production rates
- high material utilisation
- short processing time from nesting planning up to part production

- just in time supply of optimum NC control data
- reducing of stocks
- auxiliary information for setting up and clearing the NC plants without manual intervention

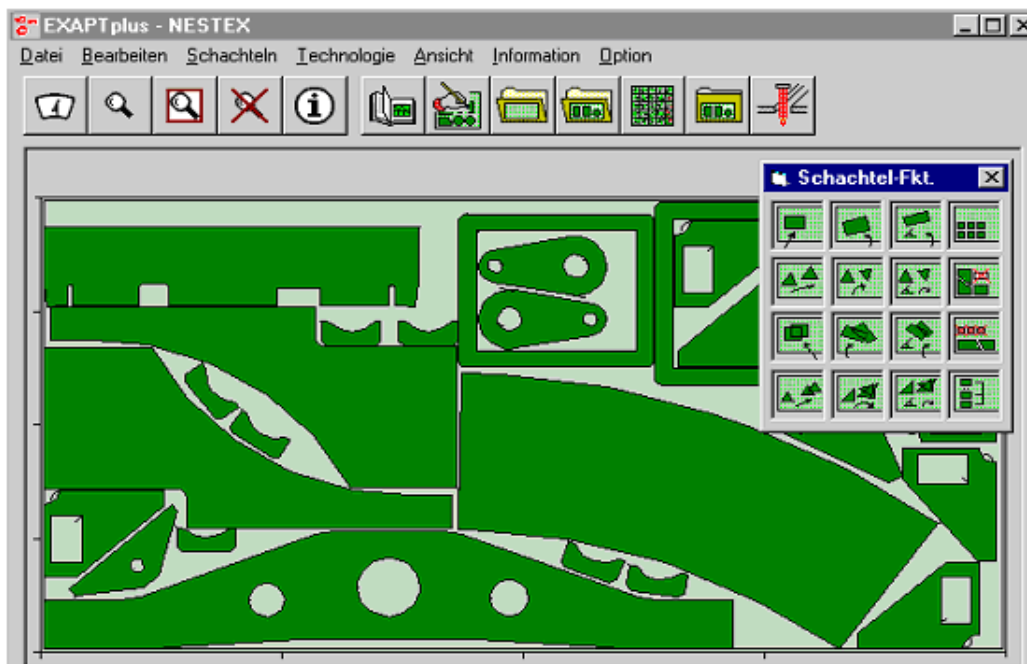
### Performance features

- fully automatic, semi-automatic and graphic-interactive nesting, also in combined forms
- subsequent and modified nesting
- processing of parts with workpiece geometries of any complexity
- utilisation of inside contours
- various nesting strategies for optimum arrangement of parts
- determination of plate requirement with default part spectrum
- production of clearance plans and overview lists
- nesting on plates, residual plates, residual pieces

- automatic generation of approach and cut tags
- traverse path optimisation, parallel torch operations, parallel board/plate operations
- technological optimization functions like string cuts, part connections, cutting bridges, common line cutting and webs

When using the order-oriented nesting planning via supplementary modules of FDO there arise furthermore more performance features

- automatic order data import from PPC (especially SAP™) via configurable interfaces
- order-dependent nesting data generation via scheduling, material specifications and part basic data
- negative booking of the nesting plans generated in NESTEX into the unfilled orders
- re-confirmation of manufactured orders to PPC (especially SAP™)



Graphic-interactive generation of a nesting plan via NESTEX

## NESTEX Basic system

- graphic-interactive generation of nesting plans with additional semi-automatic part positioning and a wide range of procedure-specific machining strategy  
(Art.-no. 19244)

## Supplementary modules for the NESTEX Basic system

- automatic nesting (Art.-no. 19245)
- oxyacetylene cutting (Art.-no. 19248)
- laser flame cutting (Art.-no. 19249)
- plasma arc cutting (Art.-no. 19250)
- water-jet cutting (Art.-no. 19251)
- parallel torch operations (Art.-no. 19257)
- residual board/plate processing (Art.-no. 19259)
- approach/cut tag generation (Art.-no. 19258)
- parallel board/plate processing (Art.-no. 19261)

## Supplementary EXAPTpdo modules for job order nesting

- NCV, Basic system of EXAPTpdo (Art.-no. 11658)
- EXAbase, EXAPT standard database system (Art.-no. 11656)
- FAorg, order data management (Art.-no. 11524)
- FAMix, order-dependent nesting data compilation (Art.-no. 11528)
- MATorg, management of plate data and residual plates (Art.-no. 11534)

## Interfaces

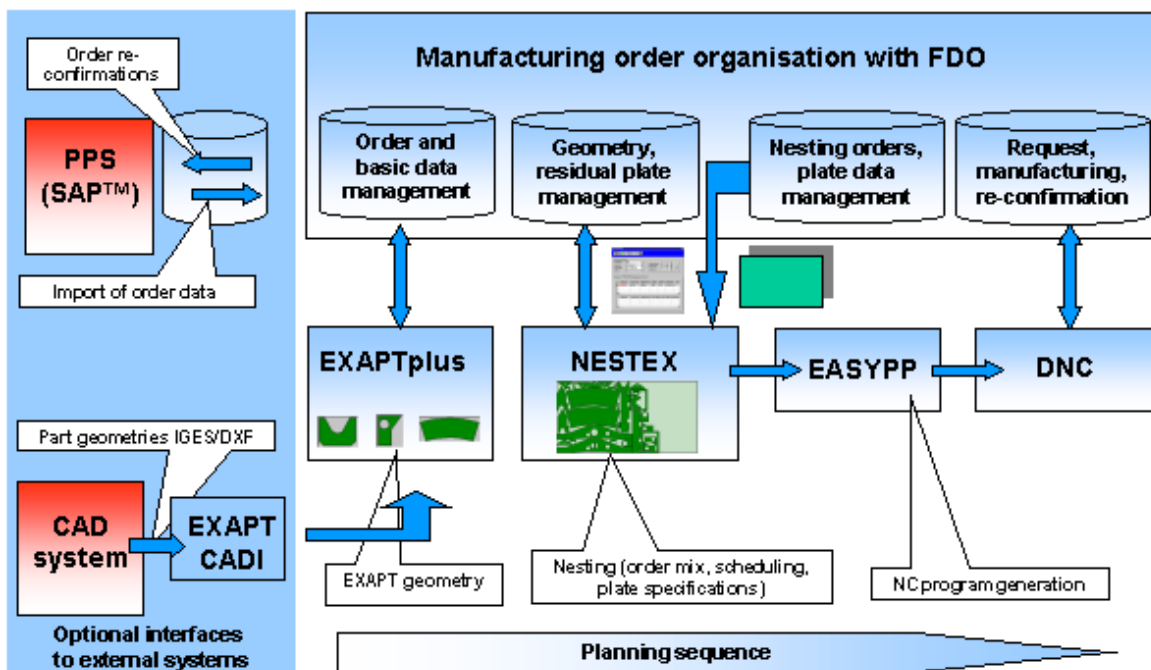
- Interface/Basic, ex-/import of databases to CSV or DIN Fachbericht 14 (Art.-no. 11601)
- Interface/IMP-FAblech, import of order data from PPC (Art.-no. 11530)
- Interface/EXP-FAblech, re-confirmation of finished orders to PPC (Art.-no. 11529)

## System requirements

- EXAPTplus Basic system for geometry data generation and treatment
- postprocessor for NC program conversion (e. g. EXAPT EASYPP)

## Installation requirements

EXAPT systems are based on Windows for the use on single PCs or servers in the network compound. Required hardware configurations depend on the software constellation and the user-related quantity of data. More details follow in the current EXAPT-recommendation for hardware configuration.



Order-dependent nesting with the EXAPT system components