

EXAPTplus Drilling/Milling

EXAPTplus Drilling/Milling covers the requirements relating to automatic technology planning for NC programming concerning drilling and milling operations up to complete machining of prismatic parts. The module is an extension to the EXAPTplus Basic system.

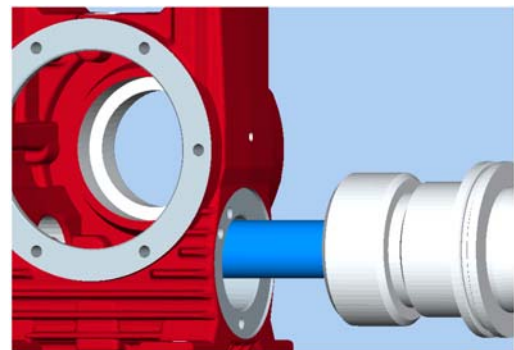
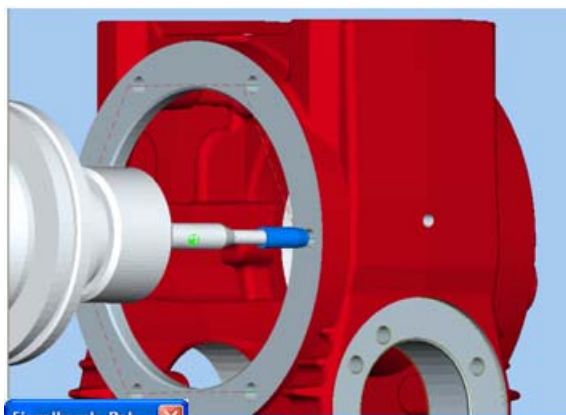
The advantages with regard to utility value are in particular:

- fast, application-oriented and efficient generation of NC programs with the EXAPT drilling/milling technology, requiring a minimum of input information
- manufacturing-oriented results even for workpieces with a large number of drilling operations and complex milling pockets
- effective simulation to guarantee reliable results
- organisational support for NC production through the automatic generation of additional information for efficient setting/resetting of the NC machines

Performance features

- the facilities of the basic system can be used with those options as far as they are technologically necessary
- consideration of clamping tool geometry and clamping position
- result simulation also including planning objects like workpiece, tool and machine
- separate description of geometry (position of machining area) and technology (machining characteristic)
- drilling with automatic, user-modifiable determination of:
 - * operation sequences for complete hole machining
 - * tools
 - * tool motions
 - * reversal tool motions
 - * cutting values
 - * processing of fits
 - * optimisations for minimum number of tools, tool changing times, tool paths

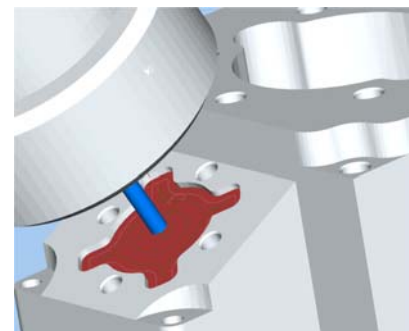
- milling with automatic, user-modifiable determination of:
 - * cut segmentation according to optimisation rules for pocket milling, surface milling, circular milling
 - * cut segmentation under consideration of islands and recesses
 - * cut segmentation under consideration of oversizes
- upgradable for
 - * milling machining of 3D-regular geometries
 - * orthogonal turn-milling with X-, Y-, Z- and C-motion axes
 - * clamping tower machining
 - * machining combinations drilling/milling/turning (also cross-side operations)
 - * optional output also for complex CNC cycles
 - * calculation of tolerances
- user-definable degree of automation for technological processing (single-step programming or automatic determination)



Milling machining with model-display workpiece/tool



Operation sequences like here for tapping are automatically generated with the EXAPTplus technology and tabulated with their significant parameters and can be edited



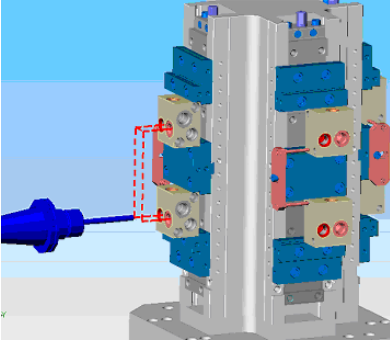
Pocket milling machining with model-display workpiece/tool

Drilling/Milling

(Art.-no. 11071)

Supplementary modules

- Clamping tower machining (Art.-no. 19996)



- Process combinations drilling/milling/turning also for cross slide and lateral surface machining (Art.-no. 11089)
- Output of CNC-cycles (see product information EXAPTplus CNC-cycles)
- Further possibilities such as cutting volume and 3-5-axis simultaneous machining are available in EXAPTSolid

System requirements

EXAPTplus Basic system

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.