

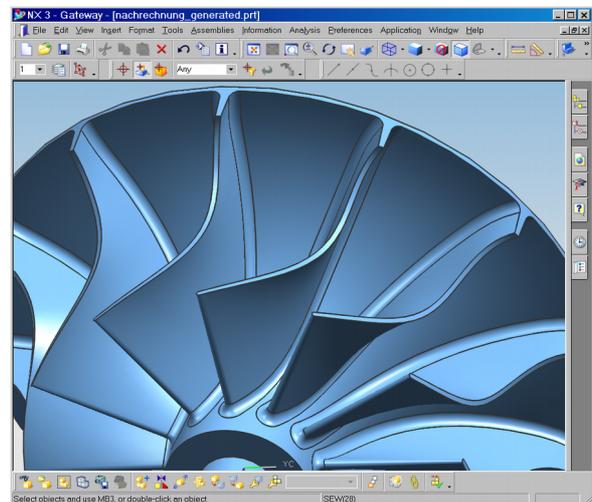
High precision solutions for demanding multiblade-wheel manufacture

stroemtec supplies a package with a wide range of innovative and effective functions for calculating and manufacturing continuous-flow machines. The package is based upon a function library. We are therefore in a position to quickly develop new strategies and rapidly implement your wishes and requirements.

All CAM calculation functions are integrated in the CAD/CAM system Siemens NX in the form of an add-on. Our many years of software engineering and 5-axis processing experience has been utilised to develop optimised cutting strategies that are simple to use and have impressive machine run times.

Basis of NX

The NX CAD/CAM system is an excellent basis due to its open structure and extremely powerful programming interface. The cutting functions are fully integrated in NX (in the so-called ONT Navigator). Of course, the tool paths that are generated can be graphically and mathematically checked using NX tool simulation (cutting simulation) and NX machine simulation.

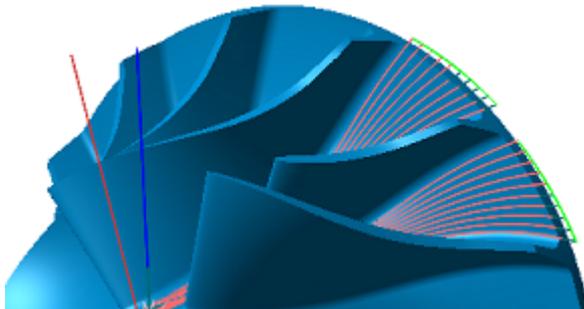
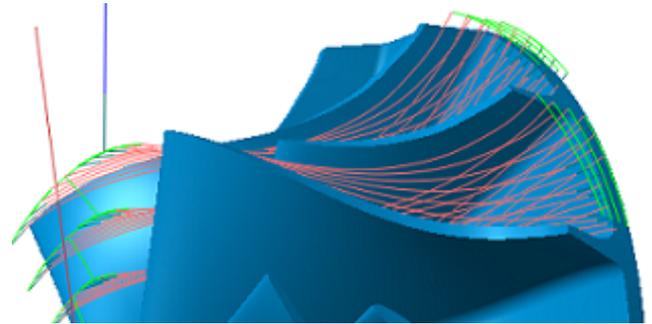


The **Multiblade Machining** module is available for Multiblade-wheel cutting applications. This module contains three optimised functions:

- **Multiblade Rough: Roughing work, starting with a pre-turned blank**
- **Multiblade Finish: Finishing of the hub area**
- **Blade Finish: Finishing of the blade flanks**

Multiblade Rough

Starting with a rotationally symmetrical blank, even material cutting takes place layer by layer. This prevents tools from cutting over the entire length, particularly conical tools. Machining takes place using either an upwards or a downwards movement but not both, therefore avoiding unwanted switching between the two machining methods and abrupt changes to the machining cross-section. Unwanted positioning movements are avoided.



Multiblade Finish

The hub area is always machined in the flow direction, which is good for aerodynamics, and machining takes place using either an upwards or a downwards movement in a similar way to the roughing process, therefore avoiding unwanted direction changes and unnecessary positioning movements.

Blade Finish

Blade flanks that are intended to be ruled surfaces are finished using a single path. This provides a smoother surface than multiple-path finishing, and the cutting time is much less than when machining with point contact. Blade flanks that are free-form surfaces can be finished with multiple paths with point contact between the tool and the surface.

