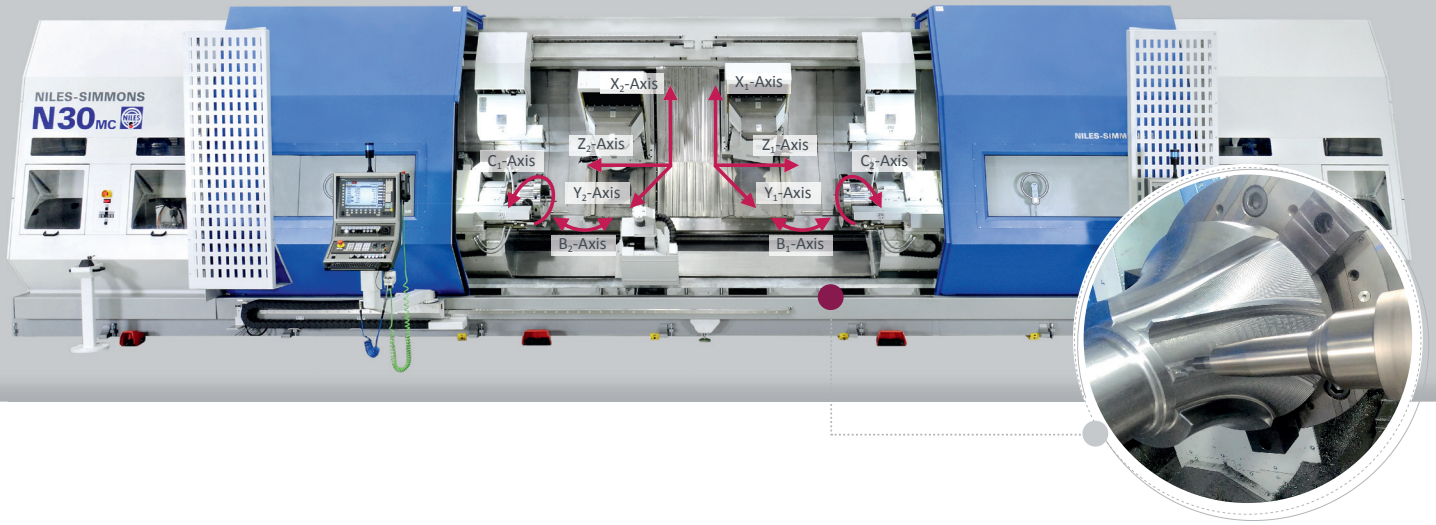
NILES-SIMMONS

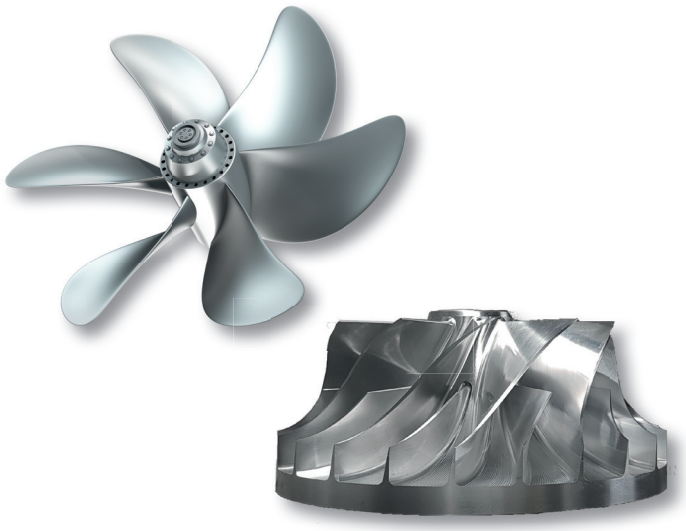



# 5-AXIS MACHINING

## SIMULTANEOUS MACHINING OF COMPLEX SHAPES AND CONTOURS

### AREAS OF APPLICATION AND USE

Simultaneous or 5-axis machining on the MC series from NILES-SIMMONS is used in a wide range of applications, such as in the aerospace industry, the automotive industry, medical technology, tool and die making, and general mechanical engineering.



### ADVANTAGES

Due to the possibility of machining the workpiece with several axes simultaneously, simultaneous machining opens up new possibilities for complex shapes and contours. This enables the production of sophisticated components with high precision and surface quality.

In addition, simultaneous machining also offers advantages in terms of efficiency and productivity. By reducing changeover times and machining several sides of the workpiece simultaneously, throughput times can be shortened and overall productivity increased. Uniform utilization of the tool used also increases the cost-effectiveness of the process.

Overall, simultaneous machining on the NILES-SIMMONS MC series enables expanded machining freedom and increased efficiency, making it a valuable technology in various industries.

## ADDED VALUE

- Flexibility in geometry creation
- Reduced machining times
- The possibility of keeping tools short and compact
- Reduction of tool costs due to increased application possibilities

## MACHINE FEATURES

### Drives:

The MC series from NILES-SIMMONS has several independent direct drives to control the movement of the various different axes. This allows simultaneous movement in multiple directions. It is important to optimize them in relation to each other to obtain the maximum ratio of dynamics and accuracy.

### Stability and rigidity:

The stability and rigidity of the MC series is the key advantage here in minimizing vibration and deformation during machining. This is especially important in simultaneous machining to achieve high surface finish and accuracy.

### High precision:

Precise positioning and repeatability of the MC series is crucial here to perform complex 5-axis machining.