




WorkNC®



## Reduce your costs, shorten your lead times



The NCspeed toolpath optimization module is fully integrated within WorkNC and brings users multiple benefits :

- A 20% reduction in machining times
- A reduction in cutter costs due to NCspeed's adaptive feedrates
- Totally reliable machining processes thanks to the software's tool loading control
- Detailed display and verification of the part before running the job on the machine

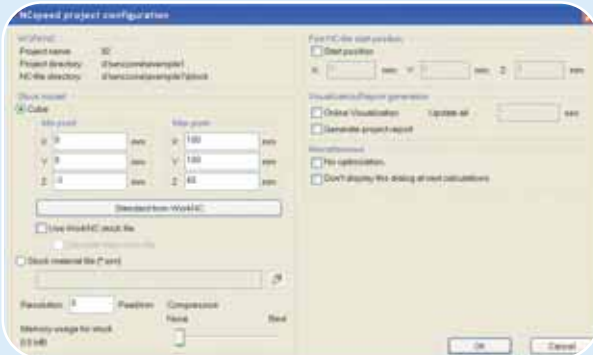
# NC SPEED

In today's competitive marketplace, manufacturers have to make optimum use of their production resources.

NCspeed allows manufacturers to optimize machining processes as this intelligent software adapts feedrates according to cutting conditions.

This can result in a 20% decrease in machining times and enables cutting conditions to be optimized for both the cutter and the machine.

## REDUCE YOUR COSTS, SHORTEN YOUR LEAD TIMES



### Complete integration within WorkNC

NCspeed is completely integrated within WorkNC. It is automatically launched after post processing and all machining parameters are directly transferred to the NCspeed module eliminating double data entry.

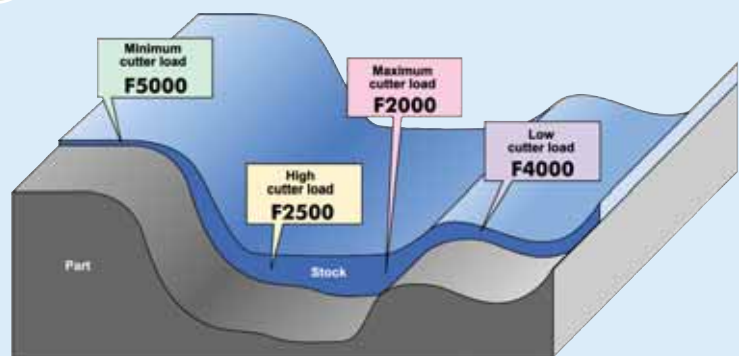
### Feedrate Optimization

NCspeed analyzes the NC files, then, based on a stock removal simulation process, calculates the real amount of material to be removed for each position of the cutter along the toolpath.

It can then determine the required cutting force and, in areas where there is a reduced amount of material to be removed and cutting conditions are favorable, the software will automatically increase the feed rate. In other areas the feed rate remains the same or can even be reduced. NCspeed ensures that machines and cutters are used to their full capacity.

### Quicker, Safer Machining

NCspeed calculates the load exerted on the cutter in the real machining process based on the amount of stock to be removed. NCspeed can be programmed to allow a greater machining safety margin. Thanks to this simulation process, potentially critical zones are detected and unsuitable cutting conditions are corrected. This protects machines, cutters and parts from any possible damage.



### Increased Tool Service Life

The optimized cutting conditions generated by NCspeed reduce vibrations.

As a result, tool service life increases and costs diminish.

### Visualize, Analyze, Validate

Not only does NCspeed's stock removal simulation optimize feedrate, it also generates a graphical display of the machining process and of

the stock removed at each point along the toolpath. Users can therefore check the NC program to ensure they achieve the results they expect.

In addition, NCspeed automatically checks for collisions between the part, the cutter, the cutter holder as well as the machine.

This collision analysis is carried out on the post processed files which allows any possible post processing errors to be detected and avoided.

