



# The road ahead begins here

## drive into 21st century manufacturing

### cnc**Check**

- > Improve your part programs with a science-based model
- > Identify and visualize critical process conditions:
  - > Spindle power
  - > Surface accuracy
  - > Chip load
  - > Tool breaking stress

### cnc**Tune**

- > Automatically optimize your part program with a machinist-friendly interface
  - > Quality with First Part Correct
  - > Maximize CNC performance



## cncCheck

### **Give your NC part program a checkup**

**Before:** select feeds based on intuition.

**Now:** improve your part program applying scientifically sound information in a machinist-friendly format.

**Identify the critical sections** of your NC code that may limit productivity, such as tool breakage, inadequate surface quality or under-utilizing your CNC production capabilities.

**Visualize your machining conditions** (spindle power, chip load, surface accuracy, tool breaking stress) so you are better informed when hand-tuning your NC part program. Confirm which sections of your part program are critical bottlenecks to production or causing tool failure.

cncCheck and cncTune go beyond geometric validation and simple optimization strategies, reporting on process conditions that determine how well your part program will perform. Internally, cncCheck and cncTune compute tool forces based on proven process models. While tool forces are the ultimate arbiters of your tool health and part quality, cncCheck and cncTune translate the complexities of tool forces into the concerns of everyday machining.

## cncTune

### **Give your NC part program a tuneup**

Automatically select best feeds for first part correct *and* fastest production time.

Manually adjusting feeds in your part program requires considerable skill and experience, is difficult and is time consuming. cncTune completes the process with the touch of a button – and even let's you play out interactive “what if” scenarios as you adjust the limits on your machining conditions.

#### **Maximize CNC performance.**

Automatically adjusts your feeds to conform to the limits of your CNC. Max out your CNC spindle while maintaining safe machining conditions for your tool and ensuring part surface quality.

**Ensure first part correct.** Getting the fastest possible throughput is not helpful if the parts don't meet your standards or your tool breaks. cncTune maximizes feed while maintaining tool health and part quality. cncTune solves this difficult problem for you, with safety always a prime consideration.

**Minimize production time.** Only after ensuring that your machining concerns are satisfied does cncTune adjust your feed rates for the shortest, but safe, production time.

