







# The knowledge of commonly used cutting tool in CNC treatment and choose a

CNC machines the category that still belongs to metallic cutting, but the characteristic that has its own. Basically the successive treatment course that runs automation, for long as a kind of height realizes this, among them tool setting time is more complex than conventional treatment, more time-consuming. Choosing a tool so from time to time a lot of problems deserve a consideration. The article introduces the relevant knowledge of CNC commonly used cutting tool. I think good tool is the first condition that improves CNC to machine efficiency.



## Tool vibration

The use as difficult treatment material is increasing, vibration already became the obstacle that improves treatment efficiency. Oscillatory happening affects treatment precision and exterior surface roughness directly, quicken cutting tool to wear away, affect cutting tool life badly, serious when cannot continue cutting treatment.

Tool vibration needs 3 conditions to exist at the same time. The machining complex that includes a tool inside is not quite solid, bring about natural frequency low. Can arise in cut process enough exterior stimulate brace up force. Exterior stimulate brace up the natural frequency of the frequency of force and process system is same. Syntonic.

The center of train of thought that settles cutting tool vibration is 3 parts. It is the smallest above all turn cutting power. Make exhaust circular arc of may small point of a knife will reduce cutting force. Increase cutting tool before horn. Change with the bit that has worried the bit that has pressed. Reduce cut deep, raise rate, increase feed. Use 90 degrees to enter horn to long and thin axis. The milling machine of thin to containing staff, circular razor blade most conduce to reduce vibration.



2 it is the static stiffness that utmost land increases tool system or clamping apparatus and work.

