



Technical Tip #142 – Threading Infeed Angles

Programming:

Modern CNC controls enable the programmer to easily adjust infeed angles, the number of passes, and depth-of-cut for each pass.

Threading inserts perform best at an infeed angle of 29.1, 2° degrees, although 15° to 30° is acceptable.

Also, it is important to maintain a minimum of .005" depth of cut per pass. In most applications, use of CNC canned cycles produces only marginally successful results. Custom-written programs are better and thus are recommended.

Last Pass:

Some CNC controls require the last pass to be at a 0° infeed angle. The chip will not break on the last pass at a 0° infeed angle.

On most carbon and alloy steels, the last pass can remain at .005" depth of cut and produce an acceptable finish. For some materials, a .001" to .003" (spring) pass may be used to improve surface finish, however, chipbreaking action may be compromised.