

Slotting Tool Speed and Infeed



The cutting speed of the material to be machined is very unlikely to be reached as you will be limited by the feed rate of the machine in the Z axis. If that is the case, use the maximum rapid traverse rate of the machine when cutting the slot but be aware of the extra load on the insert if using speeds of less than 50m/min. Ensure the tool stands off the front face of the slot by a sufficient distance in order for the machine to accelerate to the correct speed and make sure that the insert runs out into some sort of relief so that the swarf is broken away from the slot. At the end of each pass, withdraw the tool into the bore a sufficient amount to clear the slot before retracting the tool to the front of the component and beginning the next pass. Tool performance will be affected by many variables that are not in our control such as machine condition, overhang, clamping, component design, coolant, swarf, cutting speed, infeed, etc

