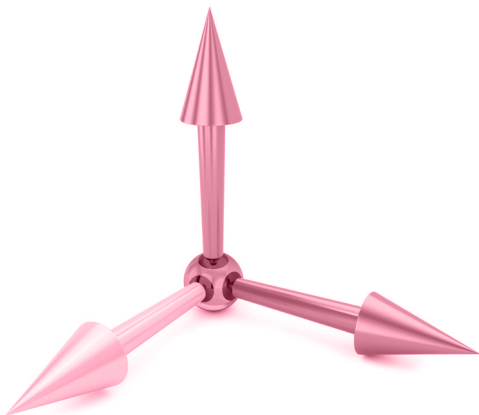
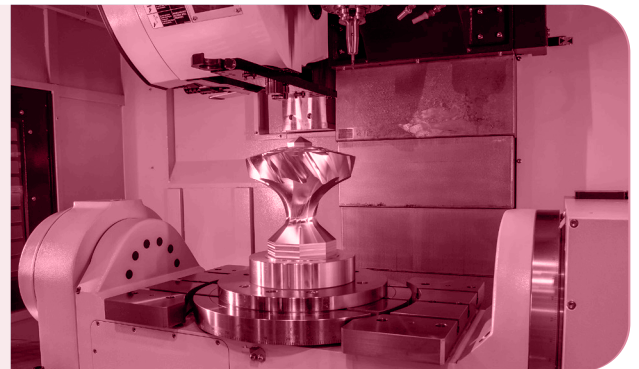


CONCEPT Through the use of Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM), we are able to take manufacturing to new levels. We create the designs in the CAD software, send the program to the CAM machine, and the machine takes it from there. This process reduces manual labor and is basically error-free. Now add to that Computer Integrated Manufacturing (CIM), which is the automation system of creating products through the use of computer controlled machines. Through the use of these machines, we can design products on many different axes and have them all print out together.

REAL WORLD CONNECTIONS

If drilling and threading holes is what you manufacture, then maybe a 3-axis machine is for you. On a 5-axis CNC cutting machine, users create intricate molds for cars, medical, and aerospace products.



BACKGROUND

A Computerized Numerical Control (CNC) mill may only have 2-axis, where you can control only the X and Y axes. Some CNC mill cutting machines have 3-axis and allow the user to control the X, Y, and Z axes. The workpiece remains stationary while the cutting tools move along all three axes. The 5-axis CNC cutting machines are able to use the cutting tools along five different axes, allowing the material to remain stationary while being cut on all sides.