



GLOSSARY

Computer Numerical Control Machining Centers (CNC) CNC machining services providers use machines that are fast, repeatable and programmable, which can function while unattended, making it possible to manufacture parts quickly and efficiently. These types of machines have a fixed component such a cutting tool that cuts surface metal. There are several types of machining centers: drilling, reaming, tapping, milling, and boring. Milling the most important because is a very versatile machine capable of doing many machining operations.

Milling machines move a work piece into a fixed cutter, or a cutter into a stationary work piece in vertical or horizontal directions along X, Y and Z axes. There are several basic types of milling machine; vertical, horizontal and universal. Each machining center performs a different type of cut; however, all of these machine tools are used to repeat operations automatically.

Lathes (also known as turning centers) A lathe is a machine tool with a 2 axis operation system which spins a block of material so that when abrasive, cutting, or deformation tools are applied to the block, it can be shaped to produce an object which has rotational symmetry about an axis of rotation.

Lathes cut a rotating part with a stationary cutting tool. The tool moves parallel and perpendicular to the work piece axis to provide the desired finished shape.

There are several types of lathes. Examples include a wood lathe, metal lathe, CNC lathe, CNC turning center, and multi-axis machine tool.

Precision Engineering This type of industry is all about specialized and accurate manufacture of products. This type of engineering belongs to a well segmented market such as aerospace or automotive. These companies need precision engineering in order to make the accurate cuts to manufacture moulds to produce a desired product. Precision engineering is very important because the cut is flawless and there is no room for mistake. Automotive, aviation and aerospace use precision engineering because none of the produced parts can be done twice; therefore, it has to be done right since the first time.