



Year 9 Engineering

Workshop tools:



Bench shears

Floor shears

Tap wrench

Process names:

Treading: Adding a tread to a bolt or bar which can be used to screw into a bolt or tapped hole.

Tapping: Adding a tread to a drill hole to enable you to screw a bolt into it.

Facing off: Taking the end or face off a product using a centre lathe.

Engineering terms:

Swarf: the small parts of metal which are produced from drilling or cutting different types of metal.

Compound grease: The grease used when drilling to ensure the drill bit does not seize in the hole.

Drawing:

Sketch up is a 3D modelling program which uses isometric view.

CIM:

Is the manufacturing approach of using computers to control the entire production process. This integration allows individual processes to exchange information with each other and initiate actions.

Automation:

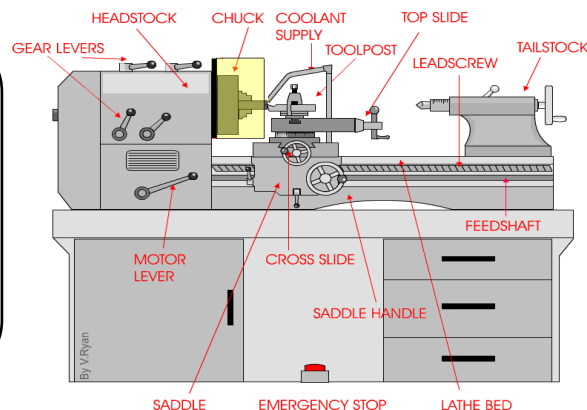
Automation can be defined as the technology by which a process or procedure is performed without human assistance. In other words, Automation or automatic control, is the use of various control system for operating equipment such as machinery.

Centre Lathe terms:

Tail stock: The end part to the centre lathe which holds the centring point and chuck.

Head stock: The engine which drives the centre lathe, it also houses the gears.

Tool post: The part which holds the tools in place.



Parts to learn on a Centre Lathe:



Engineered products: Bridges, planes, cars, boats, computers, phones, televisions, tools.

Measurements:

Imperial measurement of length: Miles, feet, yards and inches
Weight: stone pounds and ounces

Risk assessment:

Risk assessment is something that is put in place to ensure everyone who is going to use the machine is safe when using it.