



Split Die and Die Stock		<p>The Split Die and Die Stock allow you to thread your pivot pin. By rotating the split die onto your pin the tool “peels” away the metal, allowing you to create a “screw like” effect. The measurement needed for the Split Die is M4.</p>
Tap and Threading		<p>The Tap is very similar to the Split Die but instead of creating an external (outside) thread, it creates an internal (inside) thread. The tap is used for your acrylic block so the pivot pin and block can screw into one another.</p>
Lathe		<p>The lathe is used to smooth or “face off” the brass weights. A motor spins the “chuck” which holds your material. As the chuck spins incredibly fast the cutting implement can easily go across and smooth the ends of the brass. The chuck is loosened and tightened with the chuck key.</p>
Laser Cutting		<p>The laser cutter is used to cut acrylic but also to decorate the pine bases. The laser cutter works by converting electricity into a finely focussed beam to cut into a material . The laser cutter works with images on two colours: Black and Red. Anything black will engrave and anything red will be cut into.</p>

Tools and Equipment:
 Abrasive paper. Bench hook. Disk Sander. Engineer’s Hack saw. Hand File. Laser cutter. Pillar Drill. Tap and Die set. Tenon Saw. Tri Square. Twist Drill. Vice.

Durable: How well and long a material lasts.

Evergreen: A tree that keeps its leaves all year round.

Ferrous Metal: A metal containing iron. Will rust and had magnetic properties

Grain: Fibres run the length of a tree trunk, which gives its strength and pattern.

Hard: How well a material stops deformation, indentation and penetration.

Health and Safety: regulations and procedures intended to prevent accident or injury in workplaces or public environments.

Non-Ferrous Metal: A metal not containing iron. Will not rust and does not have magnetic properties

Quality Control: a procedure or set of procedures intended to ensure that a manufactured product is made to the best possible standard. This could be based upon accuracy, safety or a number of other factors.

Render: To use colour and shade to make a drawn object look more realistic.

Softwood: Comes from a tree with needle-like trees and seeds in a cone.

Threading: The act of creating a spiral down the length of a piece of metal. Used to create screws and attach metal to other materials.

Tough: How well a material can handle being hit.



Pine



Acrylic



Copper wire



Mild Steel



Brass Hexagonal bar