MARKING OUT

Marking out takes place before cutting, shaping, drilling or just about doing anything on a piece of sheet metal. Marking out is the transferring of the dimensions from the plan to the work piece in preparation for the next step of machining / manufacture. Typical marking tools include: Surface plate or marking out table Scriber, Dividers, Centre Punch, Odd leg Callipers and Engineers' square. The use of marking out is to provide guide lines to work to, to provide the only control of the size and shape of the component, and to provide the control of the position and size of any features such as holes required in the component. This is satisfactory only where limited accuracy is required.

STAGES OF MARKING OUT

Once you have selected your metal of choice, cover it with engineering blue Use a steel rule to measure from one end of the material to your required distance (30mm in video) Draw a small mark to symbolize were the correct distance is for your construction line Take your material and push it against the arm of the engineering square, this will keep your material straight at a right angle. Maneuver your material so as the blade is were your scribe marking is and draw a straight line along the blade using a scribe.

MARKING OUT TOOLS:

Marking out tools are hand tools used for making lines on metal surfaces, checking alignment, and indicating points or positions on a work piece. Tools for making out in the workshop include:

- Surface plate
- Surface table
- Scriber
- Odd-leg callipers
- Divider
- Punches
- Try square
- Box Square

Surface plate

The surface plate is a precision piece of equipment with a flat surface of high grade finish, on which work piece are placed for marking out. It is also used for testing the flatness of surfaces. Care of surface

1. Cover the surface after use to keep it free from dirt
2. Do not hammer it.
3. Do not scratch or deform the surface

Surface table

The surface or marking out table is larger than the surface plate. It is used for supporting bigger work piece, so that marking out can be carried out with ease and accuracy. It is made up of cats iron and has a high grade surface.

Scriber

The scriber is the metal worker's pencil. It is used for marking out lines by hand and together with straight edges like steel rules, try squares or box rules. It is made from high carbon steel or stainless steel, hardened and tempered. They are of various sizes.

Divider

Dividers are two-legged steel instrument used for scribing arcs, curves and for setting off distances. Dividers are available in various sizes, and may be available in various sizes, and maybe spring-loaded with a fine adjusting screw or may be firmly joined at the head.

Punches

This is either a medium or high carbon steel material. We have dot punch and the centre punch.

Dot Punch: This is used for denting scribed lines. This is done some space apart; to make the lines indelible while one is working. It is 600 at its conical end