

HSC 2002 – Industrial Technology

Use of Appropriate Industrial Processes and Equipment

Band 4/5

Describes the selection and use of some industrial processes and equipment, and other resources in the development of the major project.



- * Cutting the chromed plated steel into shelf supports and legs.
- * Notice the steel resting against the adjustable stop and Oil based solution running over the cutting surface
- * View of the bottom of the top desktop
- * Notice routed grooves for compartment walls.

ever it has been stuck too. This worked well as the gun can be used with one hand and being light was an advantage too.

Circular saw:

The circular saw is one of the most useful portable tools. It is mainly used for making straight cuts in timber as it is easier than using a handsaw and will give a cleaner and more accurate cut.

It can also be used for:

- Making joints
- Cutting sheets of timber
- Cutting wood away to start off a slot

Drill Press:

More accurate than any portable drill, a drill press uses a drilling head positioned above an adjustable table; they are both fastened securely to a sturdy base. The drill press motor is run of a belt, which is adjustable by hand. The larger the cogs the slower the speed tends to get. The drill also has a depth gauge. When drilling always use a faster speed for small diameter holes and a slower speed for larger drills.

Power Hand Drill:

This drill can come with a cord or run off a battery. This drill is very handy because it can be used in almost any application but suffers the accuracy of a bench drill. The drill has a keyless three-jaw chuck that can hold up to 10 or 12mm drill bits.

Orbital Router:

This tool is very powerful, as it can get very high in the rev range. Routers are often used to make fancy edges with different bits but they can also be used to trim larger pieces of wood with curves to size. Routers have bolt on bits such adjustable fences, which are used when

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* Notice the bearing follow the template underneath the particle board.



Jigsaw:

1. Secure jobs by using clamps.
2. Cut in a forward direction only.
3. Do not try and cut an acute angle or blade will break.
4. Always wear safety protection (glasses, ear muffs, apron).
5. Tie back loose clothing and long hair.
6. Don't lift saw out of job until blade has stopped moving.

Router:

1. Place power cord over shoulder to prevent it getting tangled in router.
2. Place the router on the job and cut sideways.
3. Tighten router bit to insure it won't fly out.
4. Position the router to the right speed.
5. Don't lift router bit out of job until it has stopped spinning.
6. Always wear safety protection (glasses, ear muffs, apron).
7. Tie back loose clothing and long hair.

Radial arm saw:

1. Adjust height of the blade.
2. Lock into place.
3. Hold job in place with left hand.
4. Pull the saw across in one motion, keeping elbow straight.
5. Wait until blade has stopped spinning before cutting another piece.
6. Always wear safety protection (glasses, ear muffs, apron).
7. Tie back loose clothing and long hair.

Drill:

1. Tighten drill bit until it is locked in.
2. Position the drill to the right speed.
3. Secure job to table by clamping.
4. Place cord over shoulder.
5. Always wear safety protection (glasses, ear muffs, apron).
6. Tie back loose clothing and long hair.