

# Mortiser

**Operating Handle-** moves the Auger and chisel bit up and down.

**Chuck-** This holds the auger and chisel in place. It is protected by the **chuck guard**.

**Start/Stop Switch-** This turns on and off the machine.

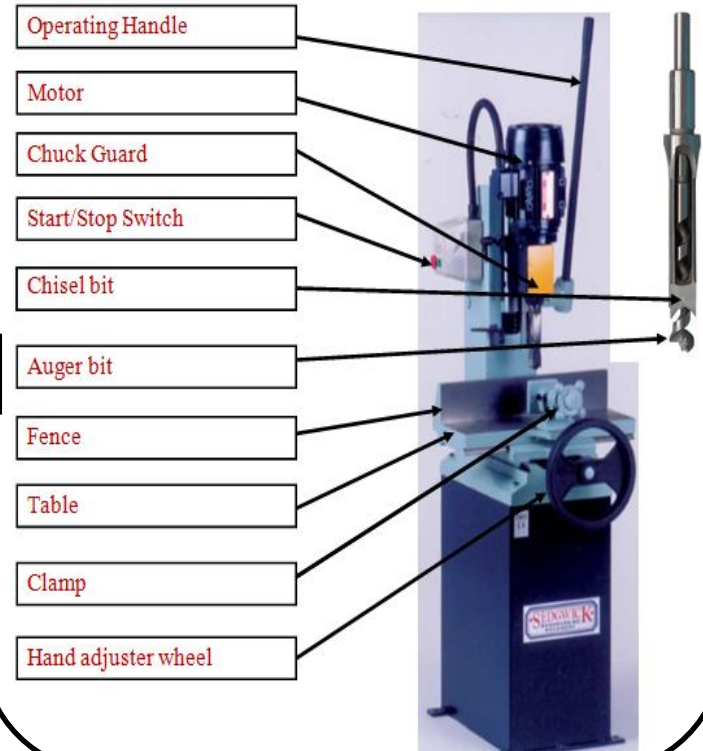
**Chisel and Auger Bits-** These are specialised bits that work hand in hand to produce a square hole.

**Fence & Table-** This holds the workpiece in place during the mortising process.

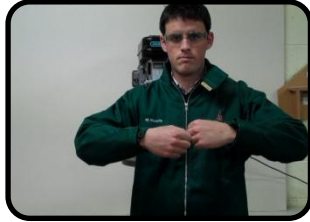
**Clamp-** holds the workpiece in place.

**Hand Adjuster Wheel-** This moves the table in a longitudinal and lateral way. The wheel is pushed in and turned for lateral movement and pulled out and turned for longitudinal movement.

Mortising machines are specialised drill presses that combine an auger with a hollow chisel to bore square holes. The auger removes most of the waste, while the chisel edges shear off the remaining material on the sides of the cut.



# Process



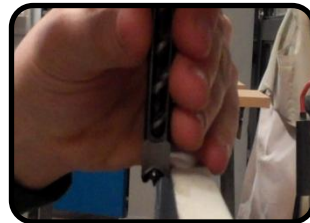
## Step 1

- Before starting the process it is important that long hair is tied up, sleeves are rolled up, any jewellery is removed and safety glasses are put on. Never wear gloves when operating the band saw.



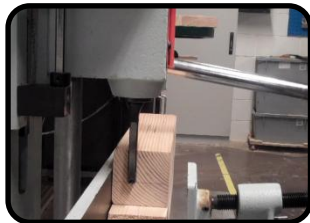
## Step 2

- When setting up the mortise bit there needs to be a specific gap between the auger and square chisel bits. This clearance allows the waste material to be carried up the hollow chisel where it is then released out the chip ejection port. The gap range is generally specified by the manufacture but is usually between 2-3mm.



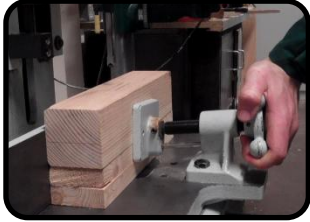
## Step 3

- The chisel bit should always be square to the fence and the chip ejection port should be facing towards the left or right side before tightening the setscrew.



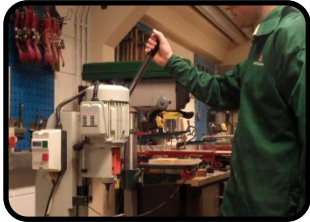
## Step 4

- When setting the depth stop on the mortiser it is important to remember that the auger is lower than the chisel bit.



### Step 5

- Before operating the mortiser, the workpiece should be securely clamped onto the table and fence. Under no circumstances should the stock ever be held by hand.



### Step 6

- When operating the machine it is important to fully concentrate on the task. The handle is used to lower the mortiser bit into the workpiece.



### Step 7

- The hand wheel is used to adjust the workpiece from side to side.