
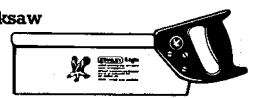


# SAWS

## 22 How to choose a Saw – Part 1

**WHAT TYPE DO YOU REQUIRE?** – This depends on the type of work you are to complete. In general terms, for straight cuts, there is a choice of a:-

**Hand saw**  

 Produces long straight cuts either along or across a piece of wood e.g. cutting boards and sheet material to size.

**or Backsaw**  

 Produces light, accurate straight cuts either along or across a piece of wood e.g. general bench work and cutting joints. The back keeps the blade rigid and may be of brass or steel. Brass is generally found on top quality saws.

### WHAT SIZE OR LENGTH?

**BACK SAWS** – The most popular lengths are 10"/250 mm & 12"/300mm but 14"/350 mm should be chosen if using sawing aids such as a mitre box.

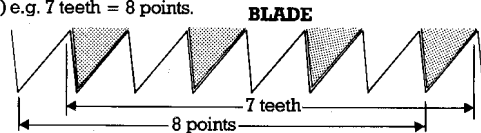
**HAND SAWS** – Lengths can vary between 20"/500 mm and 26"/660 mm – The choice of length will depend on the type of sawing to be completed but a 22"/550 mm is a good general purpose length.

As a general rule  
 – a long saw has large teeth which cut quickly, ideal for rough work.  
 – a shorter saw has smaller teeth, ideal for lighter more precise cuts.

\* As the lengths vary so to do the number of points and teeth per inch = P.P.I. and T.P.I.

### WHAT ARE POINTS PER INCH (P.P.I.)

– This measurement describes the number of points in an inch or 25mm. The number of P.P.I. together with the length will determine how the saw will cut. When choosing note that there is always one more point per inch (P.P.I.) than there are teeth per inch (T.P.I.) e.g. 7 teeth = 8 points.



Use	Length of blade (approx)	Points per inch
Sawing down the length of a plank	26"/650 mm	4½ or 6
Sawing across the width of a plank	20"/500 mm to 24"/600 mm	7 or 8
Sawing wide panels and boards	22"/550 mm	10
Sawing accurate joints – Back saws	10"/250 mm to 14"/350 mm	15 or 13

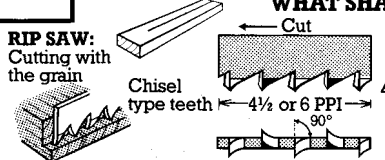
### WHAT SHAPE OF TEETH DO YOU REQUIRE?

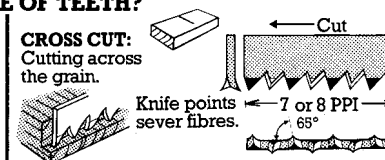
Rip, Cross Cut, Universal, Fleam (See "How to..." No.30 How to choose a Saw – Part 2)

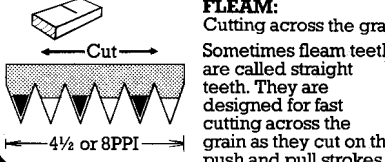
# SAWS

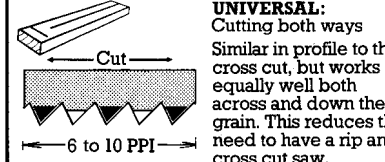
## 30 How to choose a Saw – Part 2

**WHAT SHAPE OF TEETH?**

**RIP SAW:** Cutting with the grain  

 Chisel type teeth  
 4½ or 6 PPI  
 90°

**CROSS CUT:** Cutting across the grain.  

 Knife points sever fibres.  
 7 or 8 PPI  
 65°

**FLEAM:** Cutting across the grain  

 Sometimes fleam teeth are called straight teeth. They are designed for fast cutting across the grain as they cut on the push and pull strokes.  
 4½ or 8 PPI

**UNIVERSAL:** Cutting both ways  

 Similar in profile to the cross cut, but works equally well both across and down the grain. This reduces the need to have a rip and cross cut saw.  
 6 to 10 PPI

### WHAT IS A HARDPOINT SAW?

A hardpoint saw has teeth that are tip-hardened to give extra long effective cutting life. The teeth will last up to 5 times longer than normal patterns and the saw is ideal for cutting man-made composite boards, e.g. chipboard, plywood, hardboard etc. With the increase in teeth hardness for extra life, it means that a hardpoint saw cannot be conventionally re-sharpened, this type of saw is usually identified by having blackened teeth.

Normal saws have teeth which may be re-sharpened – a task best left to the expert.

### STRAIGHT OR SKEWBACK?

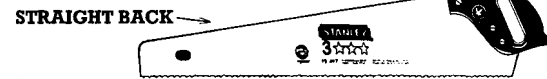
**SKEWBACK** – This refers to the curved back. It reduces weight and improves the balance of the saw making it easier to control.



Another feature often associated with a skewback is taper grinding. This is where the blade is ground on both sides to taper both from the handle to the tip and from teeth to back, this improves the clearance of the saw in the cut making it easier to use.

\* THE ABOVE FEATURES ARE NORMALLY FOUND IN TOP QUALITY SAWS LIKE THE STANLEY EAGLE HAND SAW.

**STRAIGHT BACK** – Usually less expensive than the above – they offer the benefit that the back may be used for marking out straight lines.

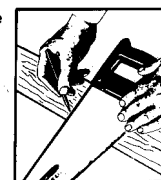


\* THE ABOVE FEATURE IS FOUND IN THE RANGE OF STANLEY HANDSAWS.

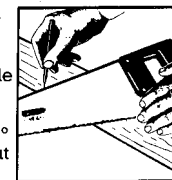
### WOODEN OR PLASTIC HANDLE?

**WOOD HANDLE**  

 Traditionally, some people prefer the 'feel' of wood – care must be taken to prevent damage.



**PLASTIC HANDLE**  
 Virtually unbreakable  
 May have built in 90° and 45° marking out feature.



AVAILABLE IN STANLEY RANGE.