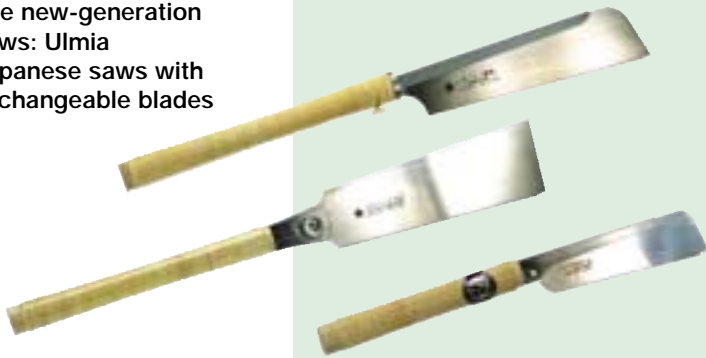


Japanese saws

The new-generation saws: Ulmia
Japanese saws with exchangeable blades



Resharpener Japanese saws calls for a good deal of experience due to the complex, fine toothting, and should always be left to specialists. For this reason, saws with exchangeable blades are becoming increasingly popular.

A major benefit of disposable blades is their surface hardening ("pulse" hardening) which brings about a marked improvement in the fracture resistance of the teeth and the blade.

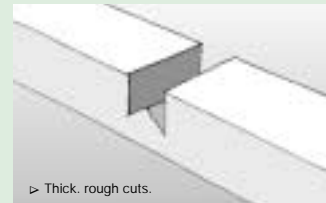
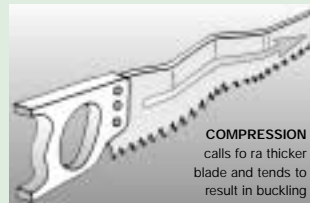
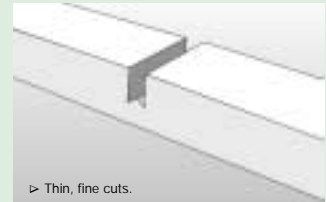
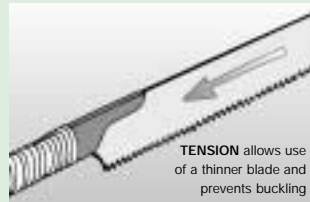
Due to the higher degree of hardness (appr. 70 Rockwell) cutting edge life is increased by around twice that of regular Japanese saws. Their cut is razor sharp and extremely precise. Every blade is subjected to final inspection under the microscope. The toothting is suitable for both soft and hard woods. The handles made of Hinoki wood (Japanese cyprus) are wound with rattan.

Cutting in the reverse stroke - a new sawing technique to revolutionise woodworking

Conventional saws are pushed, calling for a relatively strong, thick blade to guarantee sufficient stability. Japanese saws, conversely, are designed to be pulled. This allows the blades to be produced extremely thin as they are only exposed to tensile forces and are not able to become buckled.

As a consequence, the kerf is substantially finer and the required cutting force correspondingly lower. Special toothting arrangements which guarantee fast, tear-free cuts contribute towards making work processes even easier.

These benefits mean that Japanese saws find an enthusiastic following in all fields of woodworking. The saw handles are relatively long to improve guidance and permit two-handed working for larger cross-sections.

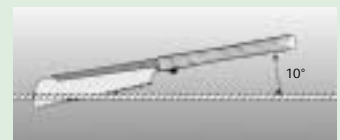


Instructions for use

- It is generally best to hold the saw in the centre of the handle. For precision cuts with short reverse strokes, the saw can be guided in the front third / for fast cuts with long strokes, in the rear third.
- Generally the saw should be guided to the workpiece at a flat angle of inclination (appr. 10°).

- Only exert any pressure when pulling the saw back; the toothting then "bites" of its own accord. The forward stroke takes place without pressure. The lower the exertion of force, the better the cutting result will generally be.
- Make even, smooth strokes over around 3/4 of the blade length with your eye directly over the cutting line.

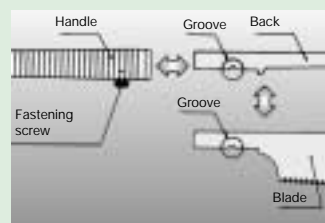
- Avoid tilting and jolting the saw blade, whose minimal thickness makes it very sensitive.
- Avoid touching the toothting and the blade, and oil the blade slightly after long periods of non-use (corrosion protection).



Changing the blade

- The tooth tip hardening process prevents the toothting from being resharpened. When worn or damaged, the blade must be replaced.
- Open the fastening screws.
- Pull the back together with the blade out of the handle.

- Take out the blade (the back is not replaced).
- Insert the new blade in the back so that the grooves are flush in alignment.
- Guide the back and blade back into the handle and tighten the fastening screw by hand.



Fixture of the exchange blade

