

# Instruction manual

# Kaindl

# Pro Feiler

suitable for

Saw blade:

- Tooth face
- Tooth back
- Alternate tooth
- Carbide teeth
- HSS teeth



Saw chain:

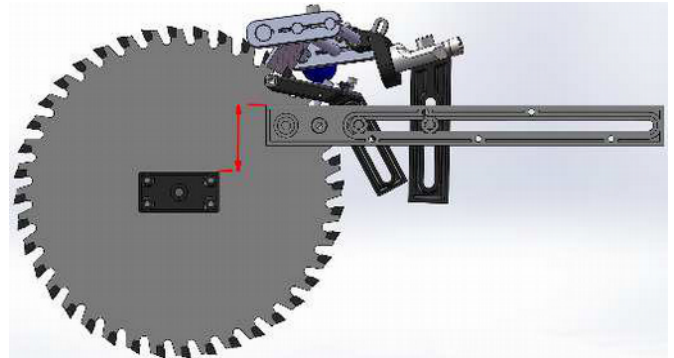
- Half chisel
- Full chisel
- Depth limiter



# Kaindl saw blade and saw chain Pro Feiler

The new Pro Feiler from Kaindl allows the sharpening of saw blades and saw chains with exact angle guidance. Both the tooth breast and the tooth back of saw blades can be sharpened. Alternating teeth or a straight-set saw blade similarly pose no problems. The new Kaindl diamond file blades can be used to sharpen hard metals, HSS or chrome vanadium saw blades. When used with a saw chain, they serve to process the chip remover / depth limiter. The use of a variety of file diameters makes it possible to sharpen all conventional saw chains. The use of diamond round files makes possible even the sharpening of hard metal chains.

Secure the guide bar and the centring block to a stable board or timber beam. This can be secured simply and easily with a vice bar or a vice on the work bench. With some tooth forms, it can be advantageous not to secure the guide bar and the centring block at the same level.



## 1. Filing the saw blade breast

Tighten the Kaindl diamond blade file into the file bracket using screw D. Only then is the diamond blade required, tightened on the diamond file blade. If the saw blade has been subject to severe wear, use the coarse diamond blade (roughing) and the fine diamond blade for the finish or given low wear (smoothing).

The clamping fixture (image 1) is set-up so that the saw blade can still be moved slightly when moved leftwards by hand and the saw tooth runs to the side of the pawl, yet locks is when being turned right.

The knurled clamping screw is placed on each tooth lightly during every filing procedure, to prevent the vibration of the saw blade. The knurled clamping screw is released to allow the revolution to the next tooth.

The amount removed during the filing procedure is adjusted via the knurled screw on the feed.

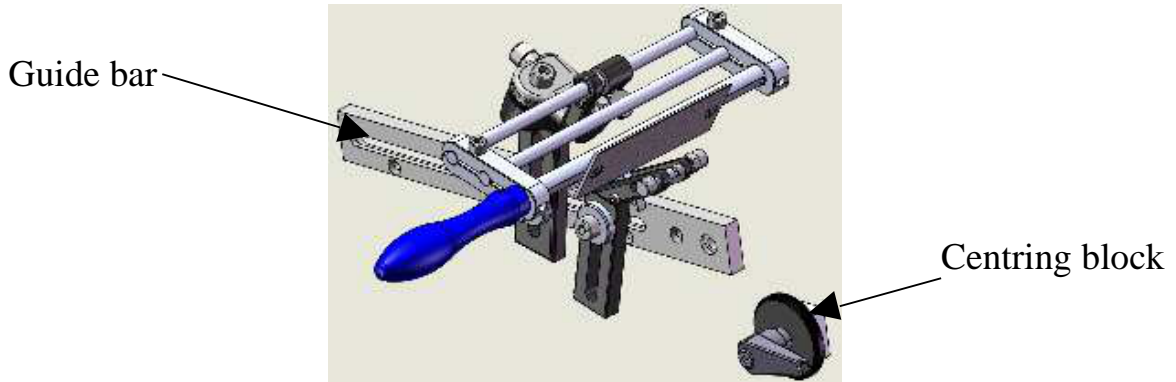
The filing / grinding angles can be set exactly using the H and I scales. If this is not known, we recommend using the angle on the saw blade for filing. Marking with a felt Pen and "scratching" lightly with the diamond file usually allows exact removal of the angle. The diamond file blade can be rotated whilst it is still in the file bracket after opening screw D. This greatly assists a parallel alignment of the diamond blade on the saw tooth.

With alternating teeth every second tooth is sharpened in the same angle, and then shifted by 1 tooth. The opposite angle is shifted every other tooth.

## 2. Filing the saw blade back

To file the tooth back, the file is set parallel to the tooth as with the tooth breast. The file procedure itself functions exactly as the tooth breast. Ensure that the knurled screw of the clamp lies as close as possible to the tooth to be filed, in order to avoid vibration.

The use of various supporting rings suits the use of the file for a range of saw blade inside diameters.



Aligning the centring block to the guide bar enables the largest saw blades to be sharpened in the most simple way possible.

The diamond blades are just as suited to processing hard metal saw teeth as HSS or other tool steels.

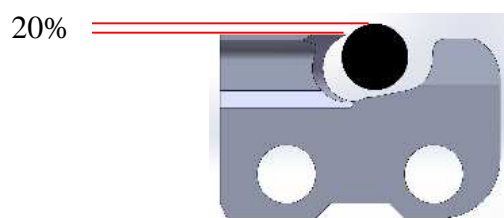
## 3. Sharpening the saw chain

The clamping lever and the clamping disc of the saw blade are removed in order to sharpen the saw chain. The additional module saw chain is fastened to the centring block. Place your saw chain between the clamping jaws A and B. Setting screw C is set to the strength of the drive links of your saw chain, so that the clamping jaws A and B remain parallel whilst the saw chain is being clamped.

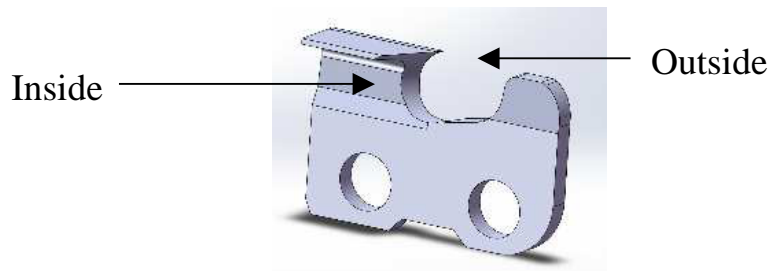
Withdrawing the saw chain (to the left) places the tooth to be sharpened on the pawl. The clamping lever clamps the saw chain safely and tightly.

The filing / grinding angles can be set exactly using the H and I scales. If this is not known, we recommend using the angle on the saw chain for filing. Marking with a felt pen and "scratching" lightly with the file usually allows exact removal of the angle.

The height of the file to the saw tooth can be set exactly using the feed and the angle guide. The height of the file in relation to the tooth roof is an important parameter and has an important influence on the sharpening outcome. The file should protrude c. 20% over the tooth roof and only 80% of the file diameter into the tooth.



The round file always works in the direction of impact (with the blow). As a result, the chain teeth are always filed from the inside outwards. This means that the left tooth is filed from the right and the right tooth from the left.



The amount removed during the filing procedure is adjusted via the knurled screw on the feed. The teeth must be the same length on both sides after sharpening, so that the saw stands "straight".

As a result, it is necessary to begin with the most damaged teeth.

We recommend marking the first sharpened tooth so that you can later see if a side has been finished.

The second side is then processed in exactly the same fashion as the first side. To do so, first loosen screw D and clamp the round file in the file bracket from the other side.

The file angle is set for the second side in the same way as for the first: using screws E and F and working via the scales H and I.

If repeated sharpening means that it is no longer possible to file, without damaging the drive links or the connection links, use a smaller file diameter.

A good means of maintaining the correct file angle is the marking usually found on the tooth.

This indicates the correct filing angle, but is also intended as a wear marking. The tooth may not be filed beyond this marking.

**Otherwise there is a risk of fracture.**

In the absence of a marking, do not file beyond the 3mm of the length of the tooth roof.

**Otherwise there is a risk of fracture.**

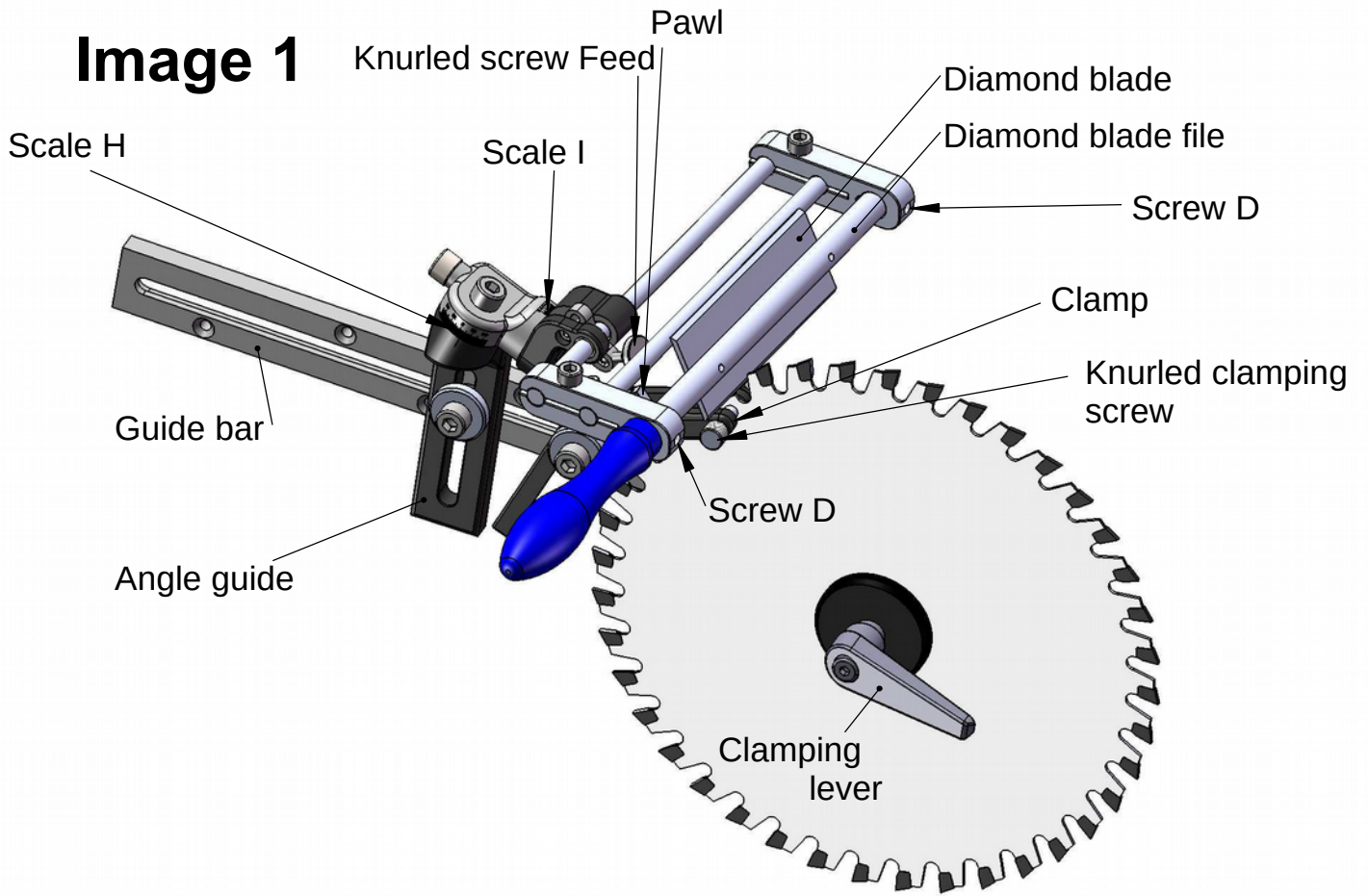
The second important component of a well-sharpened saw chain is the fuke or depth limiter (image 2).

It restricts the depth to which the cutting tooth penetrates.

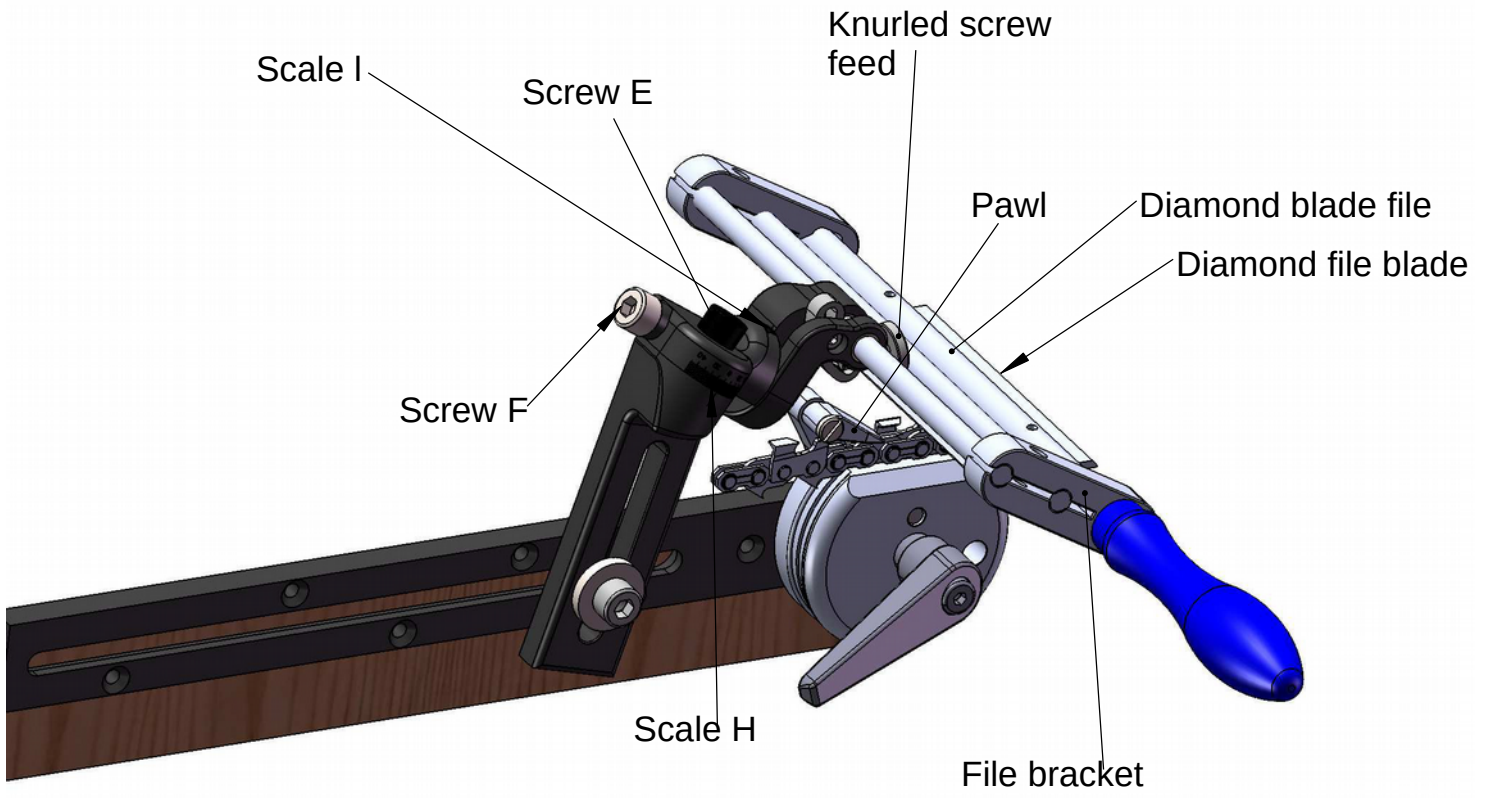
Depending on the chain type, it should be c. 0.4 to 0.64 mm deeper than the saw tooth.

The round file is replaced by the Kaindl diamond file blade. The saw chain is placed on the pawl as when sharpening a saw tooth. The diamond blade of the file is aligned parallel with the depth limiter via screws E and F and using the scales H and I. The feed is adjusted with the file abrasion.

# Image 1



## Image 2



**Image 3**

