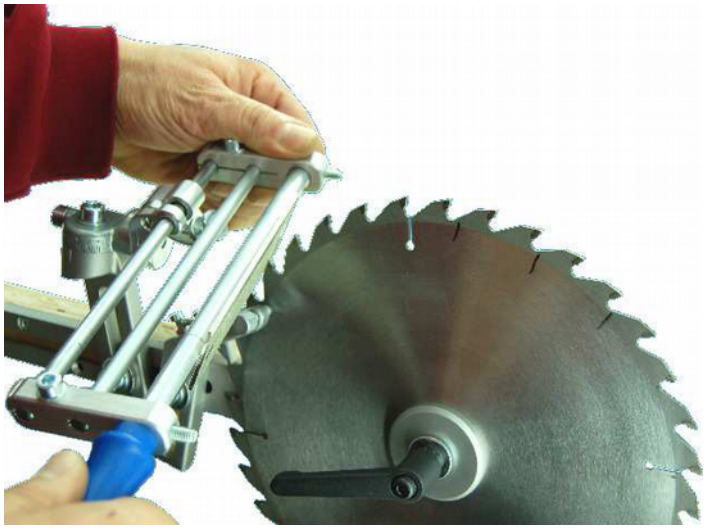
Instruction manual Kaindl Pro Feiler

suitable for

Saw blade:

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

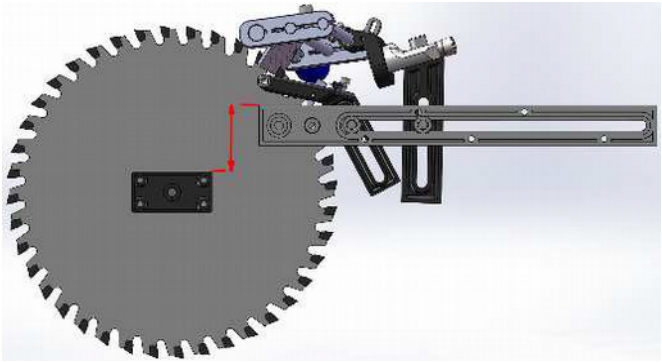


Saw chain:

- 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 f le 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 f le diameters makes it possible to sharpen all conventional saw chains. The use of diamond round f les 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 f le into the f le bracket using screw D. Only then is the diamond blade required, tightened on the diamond f le blade. If the saw blade has been subject to severe wear, use the coarse diamond blade (roughing) and the f ne diamond blade for the f nish or given low wear (smoothing).
The clamping f xture (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 f ling 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 f ling procedure is adjusted via the knurled screw on the feed.

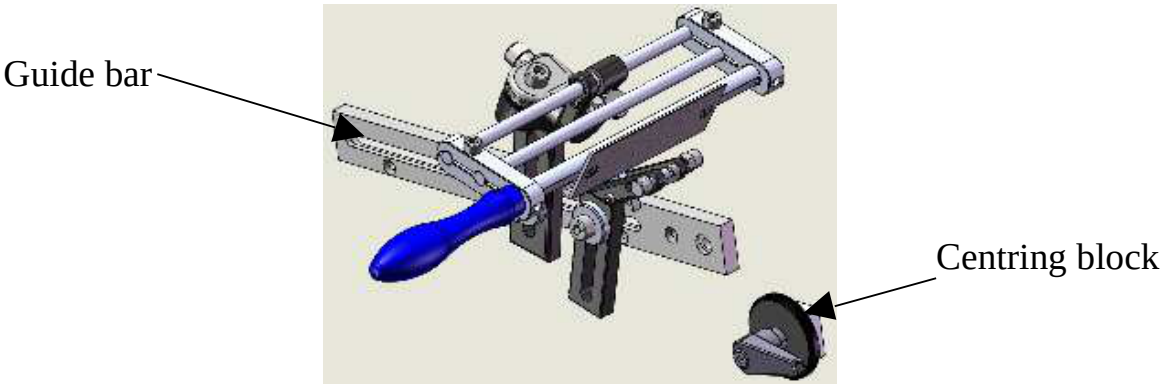
The f ling / grinding angles can be set exactly using the H and I scales. If this is not known, we recommend using the angle on the saw blade for f ling. Marking with a felt Pen and "scratching" lightly with the diamond f le usually allows exact removal of the angle. The diamond f le blade can be rotated whilst it is still in the f le 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 f le the tooth back, the f le is set parallel to the tooth as with the tooth breast. The f le 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 f led, in order to avoid vibration.

The use of various supporting rings suits the use of the f ler 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.

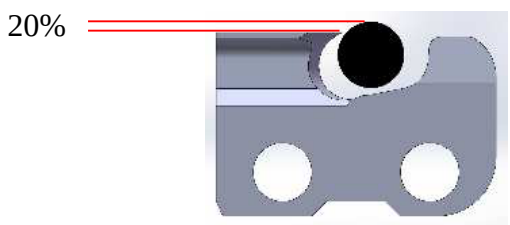
The diamond blades are just as suited to processing hard metal saw teeth as HSS or other tool steels.

3. Sharpening the saw chain

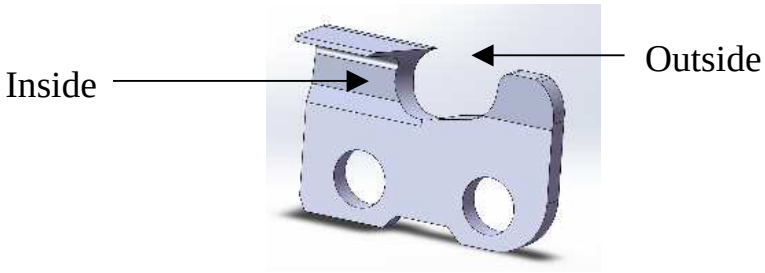
The clamping lever and the clamping disc of the saw blade are removed in order to sharpen the saw chain. The additional module saw chain is fastened to the centring block. Place your saw chain between the clamping jaws A and B. Setting screw C is set to the strength of the drive links of your saw chain, 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 f ling / 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 f ling. Marking with a felt pen and "scratching" lightly with the f le usually allows exact removal of the angle.

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



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



The amount removed during the f ling 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 f rst sharpened tooth so that you can later see if a side has been f nished.
The second side is then processed in exactly the same fashion as the f rst side To do so, f rst loosen screw D and clamp the round f le in the f le bracket from the other side.
The f le angle is set for the second side in the same way as for the f rst: using screws E and F and working via the scales H and I.
If repeated sharpening means that it is no longer possible to f le, without damaging the drive links or the connection links, use a smaller f le diameter.

A good means of maintaining the correct f le angle is the marking usually found on the tooth.
This indicates the correct f ling angle, but is also intended as a wear marking. The tooth may not be f led beyond this marking.
Otherwise there is a risk of fracture.
In the absence of a marking, do not f le 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 f uke or depth limiter (image 2).
It restricts the depth to which the cutting tooth penetrates.
Depending on the chain type, is should be c. 0.4 to 0.64 mm deeper than the saw tooth.

The round f le is replaced by the Kaindl diamond f le blade. The saw chain is placed on the pawl as when sharpening a saw tooth. The diamond blade of the f le 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 f le abrasion.

Image 1

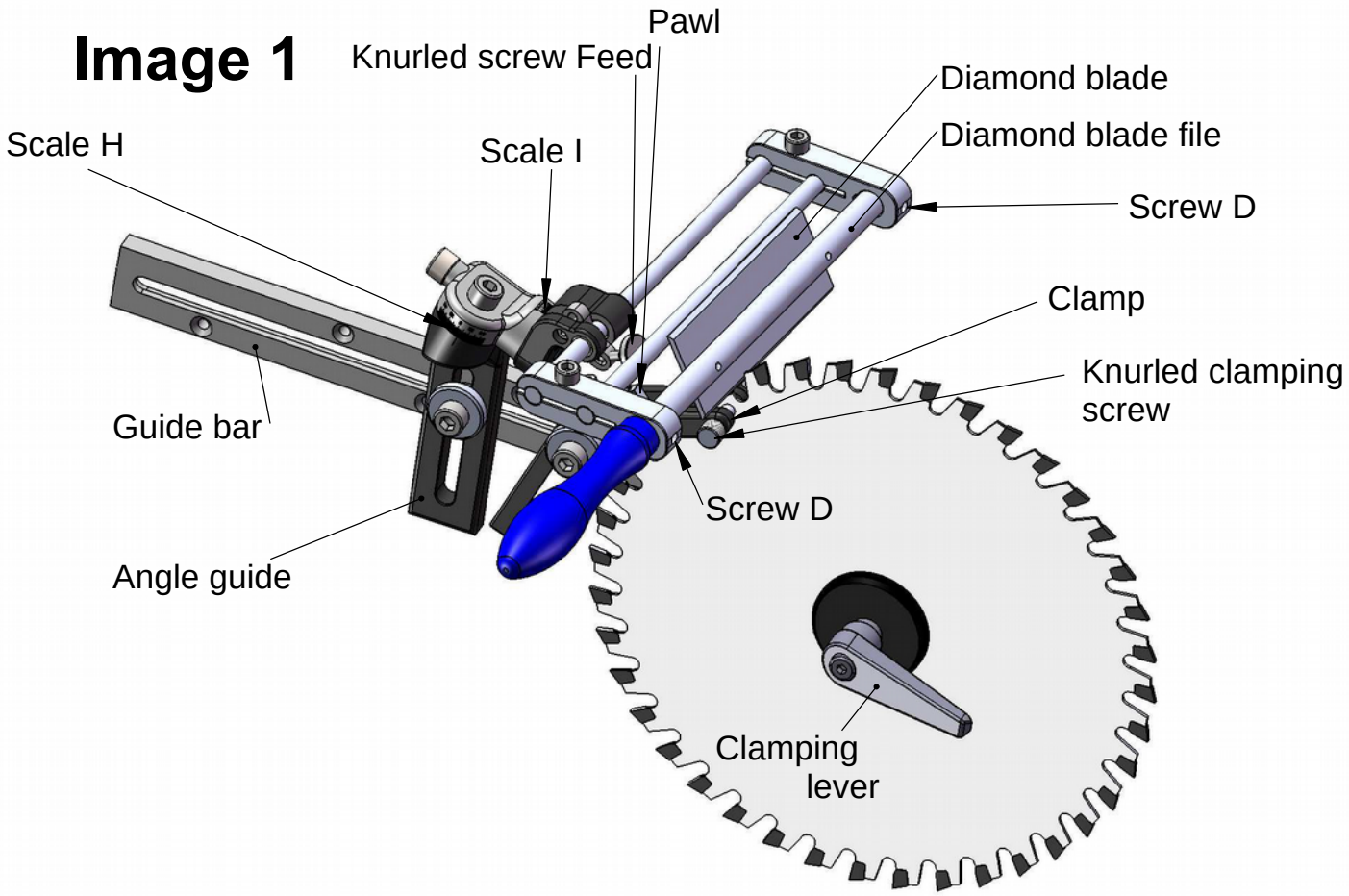

Pawl
Knurled screw Feed
Diamond blade
Diamond blade file
Scale H
Scale I
Screw D
Clamp
Knurled clamping screw
Guide bar
Screw D
Angle guide
Clamping lever

Image 2

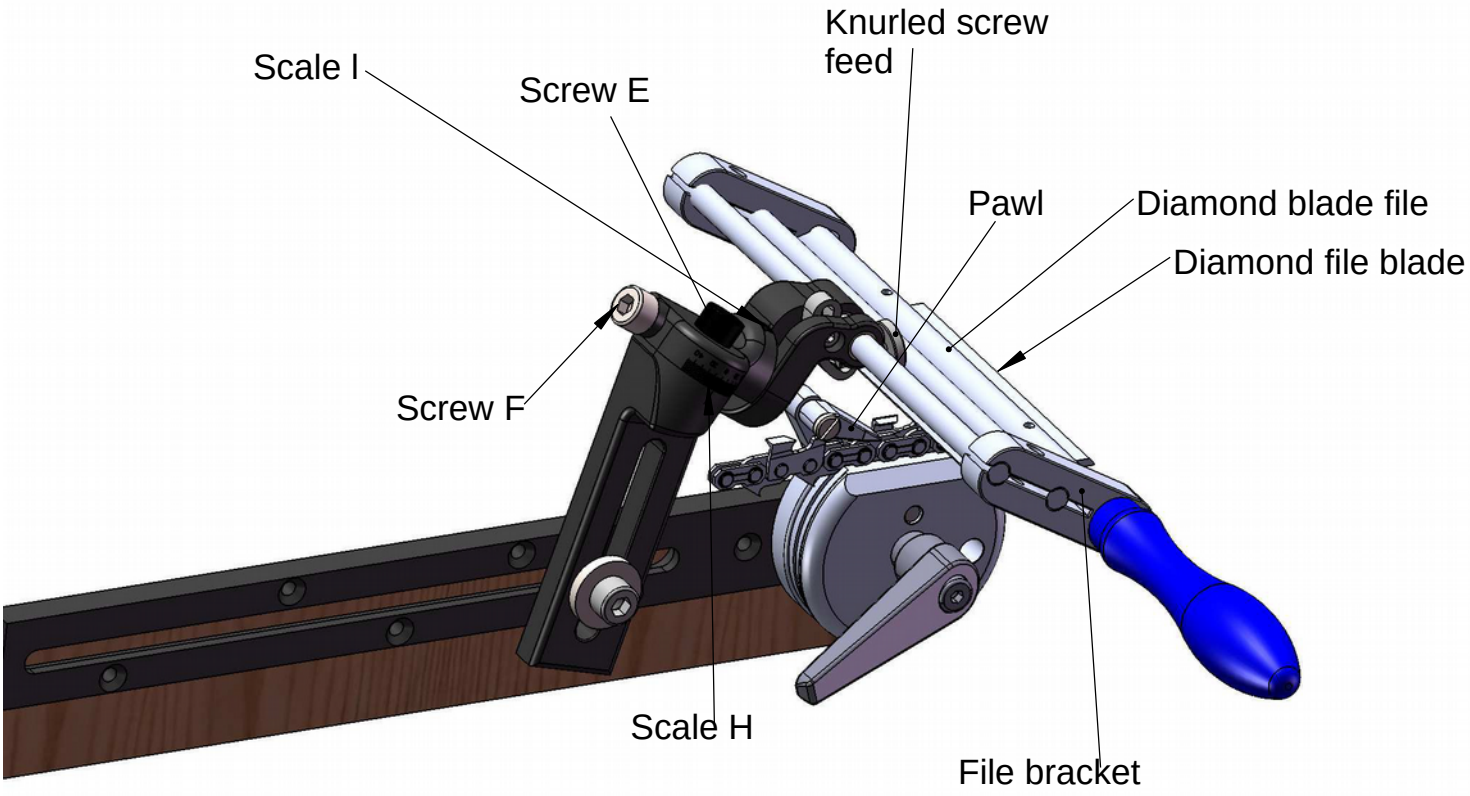
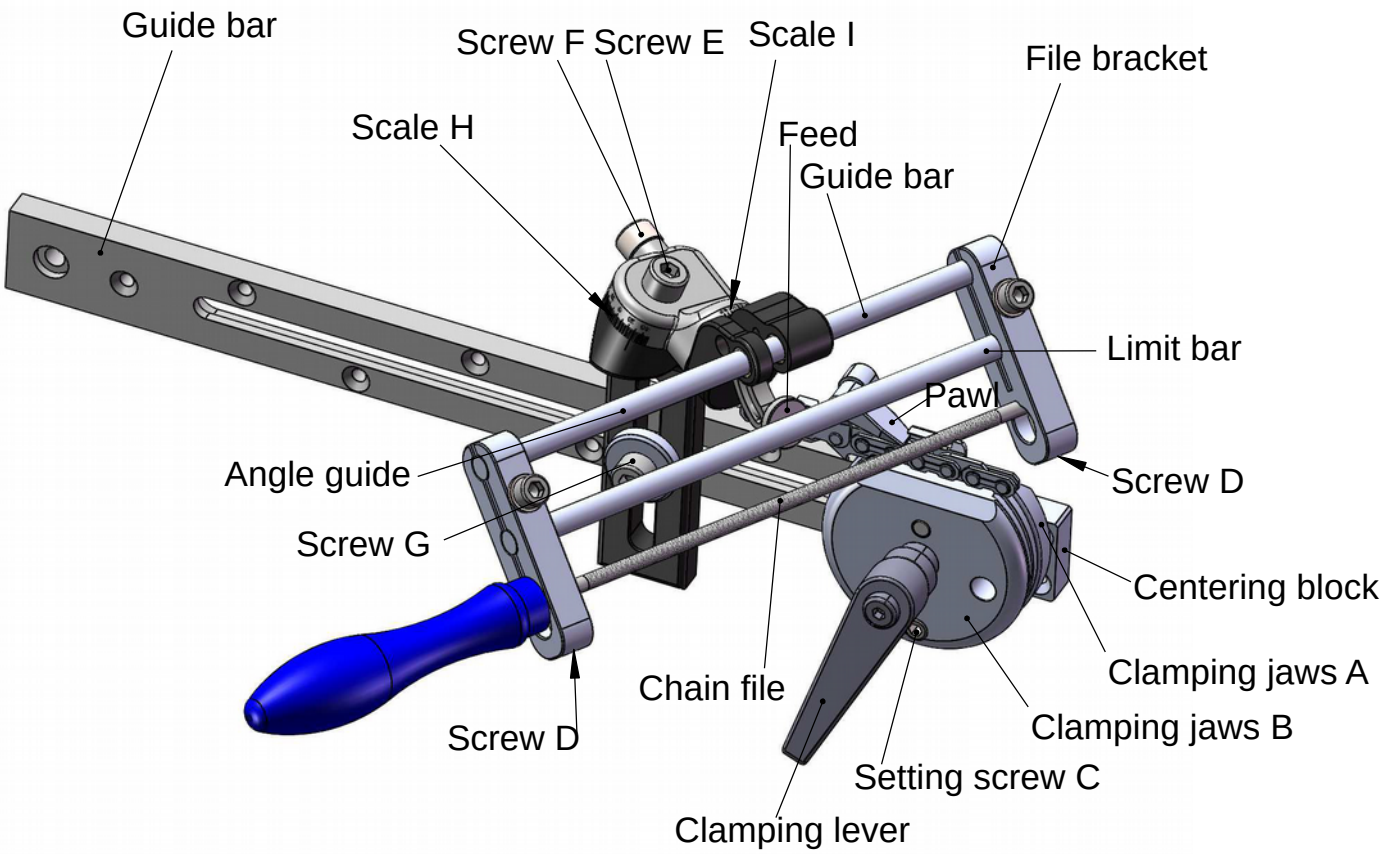

Knurled screw feed
Scale I
Screw E
Pawl
Diamond blade file
Diamond file blade
Screw F
Scale H
File bracket

Image 3


Guide bar
Screw F
Screw E
Scale I
File bracket
Scale H
Feed
Guide bar
Limit bar
Pawl
Angle guide
Screw D
Screw G
Centering block
Clamping jaws A
Chain file
Clamping jaws B
Screw D
Setting screw C
Clamping lever