

Introduction

The correct grinding of a shearing comb is a delicate process and calls for quite a comprehensive knowledge and experience. The following explanations are meant to better understand the mechanics of the tensioning system of the shearing head and the shearing blades. With this know-how and with the appropriate equipment, the grinding of shearing blades shouldn't be a red rag for you anymore.

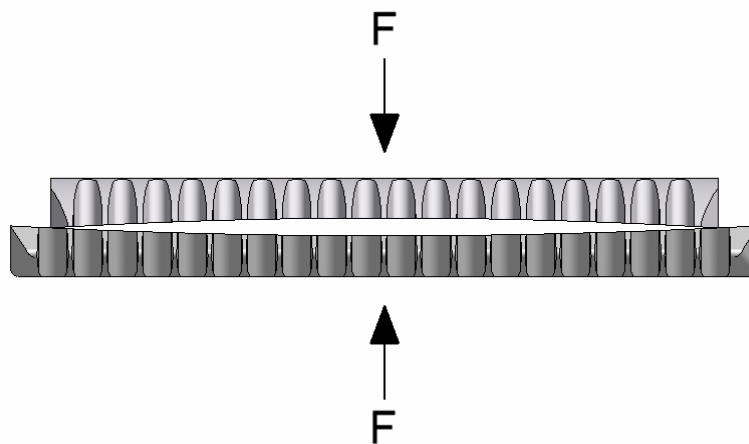
What's our aim?

- A competent, high quality and quick grinding service at a reasonable price.
- Blades grinded in a correct way and a well maintained shearing machine lead to a good shearing result.

How do we reach these goals?

- We know how the tensioning system works
- We understand the grinding process and its pitfalls

Functionality of the tensioning system



Hollow Grinding

To get the best possible performance from your comb and cutter, the correct grinding of your shearing blades is more than important.

Why do you need a hollow grind?

Once a hollow has been ground into the comb and cutter, the two ground surfaces will come together in a scissor action. A scissor action is required for two surfaces to cut. If we talk about grinding we mean that your blades need a hollow grinding.

Which are the most common flaws?**Combs**

- Uneven comb surface
- Too much hollow grinding
- Either too coarse or too fine grinding

Shearing head

- Screw between driving carrier and laminated springs riveted is ageing and outworn (cattle/horse clipping head)
- Crank drive block is missing
- Comb support is deformed
- Comb / cutter is misplaced or badly adjusted

What are the most common mistakes while grinding?

- Grinding disc not prepared correctly
- Grinding disc unevenly used
- Grinding disc used
- Grinding handling (wrong way of putting / removing the blade on the disc)
- Wave lines grinding pattern
- Too much and uneven hollow grinding

Which blades shouldn't be ground anymore?**To thin combs / cutters**

When the blade is too thin, it becomes too elastic, possibly also too pointy and hasn't the full hardness anymore. The blade has to be replaced.

Missing outer teeth

If outer teeth are missing on a comb, it has by all means to be replaced for safety reasons. There is an imminent injury danger for the animal and the user.

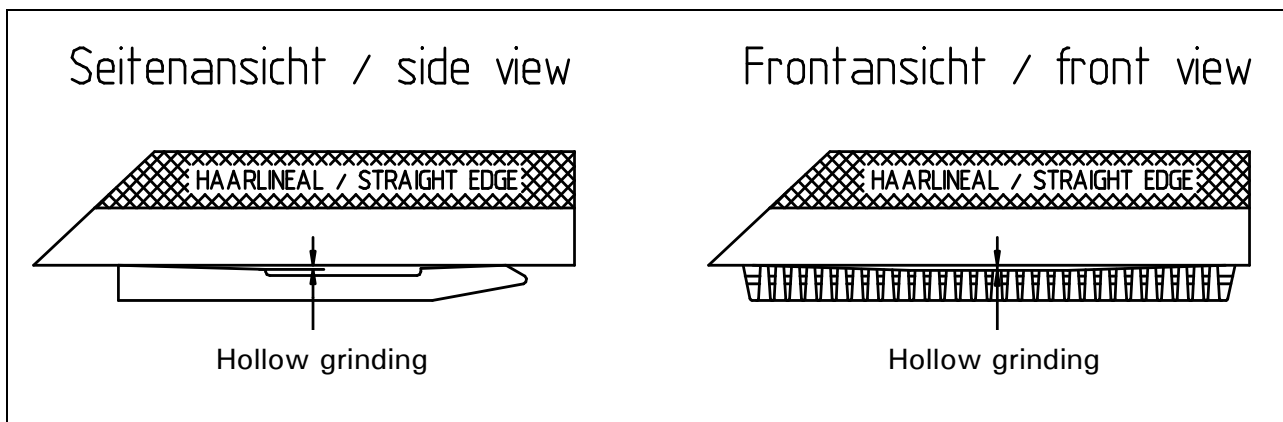
Missing inner teeth

If 1 or 2 inner teeth are missing, a reduced clipping / shearing is still possible. One has however to count with a stripes pattern in the shorn coat.

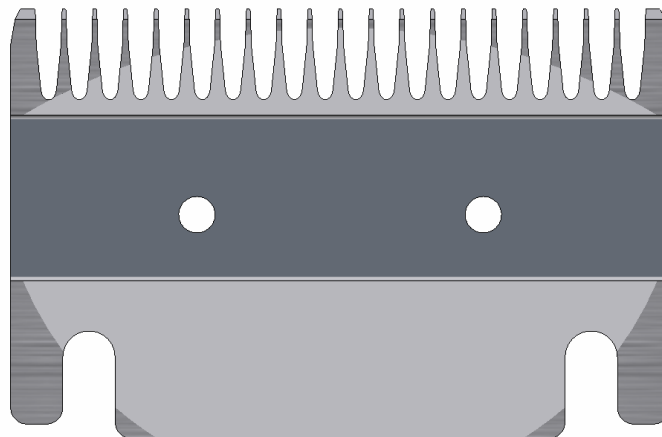
Rusty blades

Those can't reach anymore their full performance, as the rust between the teeth can't be removed. Due to the rust, the cutting edge of the teeth is not as hard anymore as on a new or well-kept comb set.

How do I check the hollow grinding?

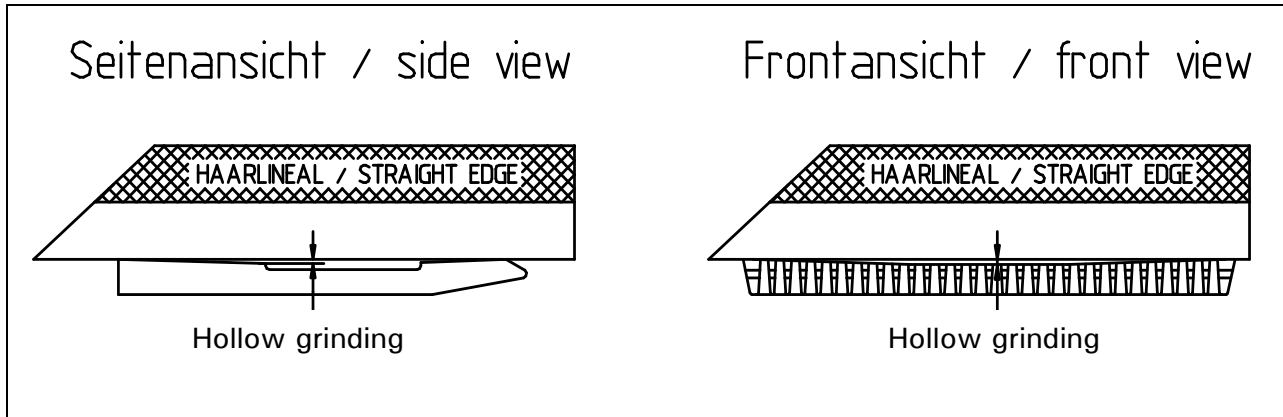


Important: The correct hollow grinding is best controlled with a precision ruler (718-001) and with a silicone carbide stone (799-054).



Move the blade with a slight pressure over the silicone carbide stone, and compare the result with the picture above.

Important: The shape of the hollow grindig has to be spherical and even!

How much hollow grinding?**Cattle- and horse clipping blades**

Cutter	0.005 – 0.015 mm
Comb	0.005 – 0.015 mm

Sheep shearing combs and cutters

Cutter	0.015 – 0.025 mm
Comb	0.015 – 0.025 mm

Small animal clipping blades

Cutter	0.000 – 0.002 mm
Comb	0.000 – 0.002 mm

Reminder: 1 human hair has a diameter of 0.060 mm

Important accessories from our range of products:

- 799-054 **Silicone carbide stone**, control of hollow grinding
- 718-019 **Emery paper K60 self adhesive 400**, for sheep shearing combs and cutters, not suitable for vertical grinders
- 718-000 **Multi-purpose comb and blade grinder**, with two-sided grinding disc, grinding paste, blade holder, precision ruler
- 715-210 **Grinding paste, fine**, rod, only for small animal blades
- 715-220 **Grinding paste, coarse**, rod, only for cattle and horse clipping blades
- 718-001 **Precision ruler DIN 874**
- 718-002 **Blade holder** for cattle/horse clipping blades, crossed, for old style bended blades
- 718-003 **Blade holder** for sheep shearing combs and new style flat cattle/horse clipping blades
- 718-004 **Hollow grind measuring device**, only for cattle/horse clipping blades
- 718-010 **Spare grinding disc** for combined grinder Ø355/Ø25
- 718-560 **Spare grinding disc HTS** Ø400/Ø25
- 719-301 **Grinder ACCUTEK**, only for sheep shearing combs and cutters
- 719-032 **Sharpening PENDULUM**, new style, incl. 3 handles and aluminium case
- 719-010 **Grinder disc set**
- 719-011 **Emery paper 40 coarse** (combs)
only for sheep shearing combs
- 719-012 **Emery paper 80 fine** (cutters)
only for sheep shearing cutters
- 719-013 **Rubber latex-based 250 ML**
only for sheep shearing grinder with emery's
- 719-055 **Heiniger Video "Grinding Combs & Cutters"**