

## Recommendations and Technical Data

grinding wheels	quality of knife	grinding material	circumferential speed grinding wheel V (m/sek)	table-speed V (m/min)	feed per pass (mm)
Segments	F-220 Swedish-Quality	grain 46–60 hardness K–M Bond: Bakelite	20–25	20–25	0.01–0.03

Grinding errors shall be avoided by:

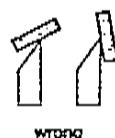
- using the correct abrasives
- sufficient coolant
- careful infeed of the grinding wheel
- early dressing of grinding wheel

It is important to use the best suited grinding wheels, such like segments, grinding – cylinder or cup grinding wheels (see recommendations and technical data).

Maximum coolant (water with rust preventive and cooling admixture) should be used (150–200 l/min.) directly at the grinding area. For sufficient cooling is thus cared and the abrasive particles, setting down in the pores, will be washed off and away.

The burr should be carefully removed by honing, after grinding. The quality of honing highly affects the useful life of the cutting edge.

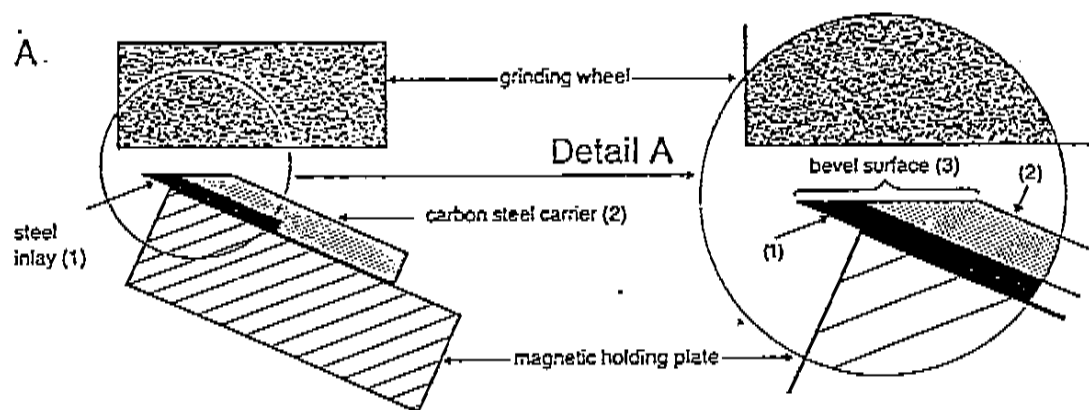
Guidance of honing stones:



Deficient grinding machines, too high grinding pressure, too low water cooling and unfit grinding wheels are leading to grinding errors. Here the implications: The cutting edge shows burns (yellow - blue colouring/ decarbonization), which result in insufficient output, cracks and nicks.

We cannot replace free of charge knives with grinding errors.

The following technical description of regrinding is valid for all qualities of steeled paper - cutting knives.



It is essential that the steel inlay (1) and the carbon steel carrier (2) be ground together. The grinding wheel must contact the full width of the bevel surface (3).

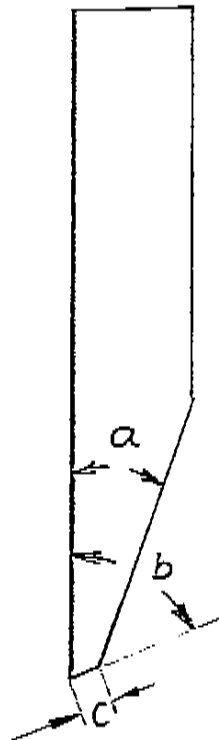
This assures that the grinding wheel remains in continuous contact with the unalloyed base which serves to roughen the wheel, and thus gives the cleanest grinding surface for the steel inlay. The risk of burning (decarbonization) is thus reduced. Naturally, maximum coolant should be used, (150–200 l/min), directly at the grinding area.

Pay maximum attention to choose the correct grinding wheels.

If exceptionally, only the steel inlay (1) has to be ground, such as for adding a secondary (compound) bevel, use the softest available wheel and grind with extreme caution. Wheel feed per pass should not exceed 0.010–0.015 mm.

# IDEAL

## Knife angle on Ideal Paper Cutters



Normal angle (a) is  $21^\circ$ . For special paper it is possible to add a second angle (b) to the knife with  $24^\circ$  on a length of 3,5 mm (c). This can be done locally.