



ESM

Professional resharpening of ESM knife assemblies



**Wear protective
gloves!**



**Wear safety
glasses!**

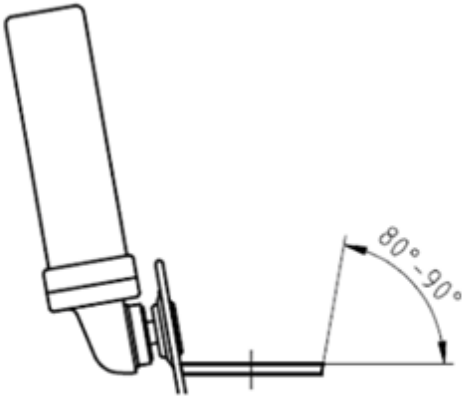
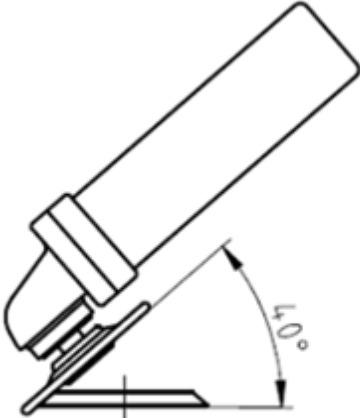
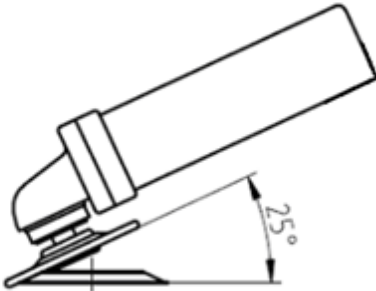


**Wear ear
protection!**

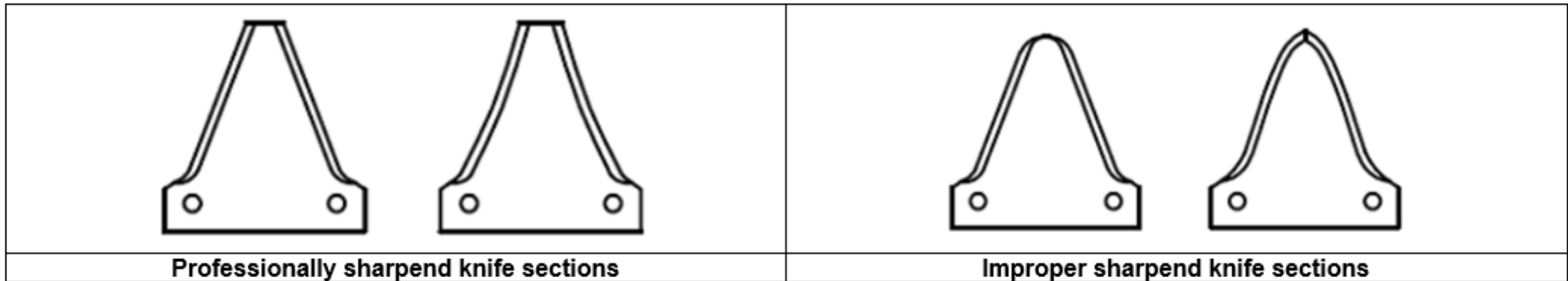
Although all ESM cutting and mowing systems are largely resistant against stones and similar objects, it can occasionally happen that fingers or bar sections and knife sections get damaged or bent. It is therefore advisable to check the knife assembly for damages every time it has to be resharpened.

Preparation : resharpening of ESM knife assemblies

1. Clean the knife assembly.
2. Remove the knife assembly and check for serious bending / twisting. Straighten the knife assembly carefully, if necessary.
3. Check for loose knife sections and re-rivet them if necessary. Straighten bent knife sections carefully afterwards. Replace damaged single knife sections.
4. Operate for grinding with suitable grinding equipment only, that will ensure the controlled guidance of the grinding medium to the knife section's cutting angle.
Never practice the resharpening "freehanded".

		
Bar sections are sharpend at an angle of 80 ° - 90 °	Knife sections are sharpend at an angle of 40 °	Finger sections are sharpend at an angle of 25 °

- While resharpening, **do never overheat the knife sections on the cutting edge**, otherwise they will anneal and soften and then become blunt much more quickly!
- While resharpening, make sure that the knifeback, the knife head and the carrier stud on the knife sections won't get damaged!
- While resharpening, ensure that **the specified sharpening angle is maintained!** (see table on top)



- Do not round off the front of the knife sections while grinding!
- Do not grind the cutting edge like a curve!
- Remove the burr if possible. Be careful not to blunt the cutting edge!



ESM

Systems and manufacturers of manual grinding machines

Status 2024





ESM Art.-Nr. 199.0130

- Support- / adaption-frame suitable for standard angle grinders.
- Stepless angle adjustment – marked - grants the **correct** grinding angles.
- Simple bench mounting of the guide rail and knife assembly holder.
- Quick and easy service grants consistently sharp sections = high cutting performance.
- Most cost-efficient service tool - suits perfect for mobile services as a standard equipment of service vehicles.



https://www.kersten-maschinenfabrik.de/fileadmin/_processed_/1/c/csm_SHARK_Messerschleifer__7__649e6b6554.jpg



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Hand Grinder SHARK | KEMA - Kersten Maschinenfabrik

Blesoma Hand Grinder



www.esm-ept.de



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<https://doppelmessermähwerk.de/wp-content/uploads/2024/05/Blesoma-Handschleifmaschine-2-1.png>



Hand Grinder - Blesoma



<https://www.esto-innovation.eu/wp-content/uploads/2023/09/Messerfix-7-scaled.jpeg>



<https://www.esto-innovation.eu/wp-content/uploads/2023/09/Messerfix-13-scaled.jpeg>



<https://www.esto-innovation.eu/wp-content/uploads/2023/09/Messerfix-27-scaled.jpeg>



Hand grinding device “Messerfix – ESTO Innovation (esto-innovation.eu)



<https://moser-biglen.ch/wp-content/uploads/2021/02/r100d.png>



Hand grinder ROTAX –A.Moser Biglen
(moser-biglen.ch)



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Systems and manufacturers of CNC grinding machines

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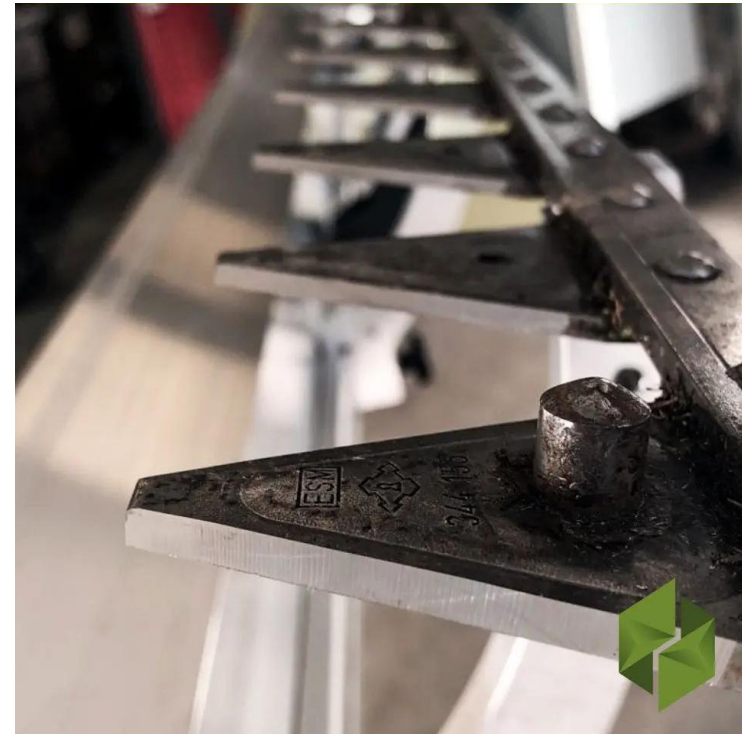
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CNC grinder BBS GmbH |



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CNC Grindmaster - blesoma



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CNC grinder SBS – Sauerburger