

Knives for slitting

Modern state-of-the-art high-performance winder require extremely wear-resistant cutting tools and solutions.

TKM will select the most suitable knives for your cutting application.



Upper knife features

- Preliminary bevel 30°
- Main bevel 15°
- Recess bevel 3°
- Surface roughness Ra 0.03 µm /Ra 0.10 µm
- Axial runout 0.01 mm
- Radial runout 0.02 mm

Lower knife features

- Carbide tipped
- Solid steel (chrome steel, HSS or PM steel)
- Surface roughness Ra 0.10 µm
- Recess bevel 4°
- Axial runout 0.02 mm
- Radial runout 0.03 mm
- Parallelism 0.01 mm

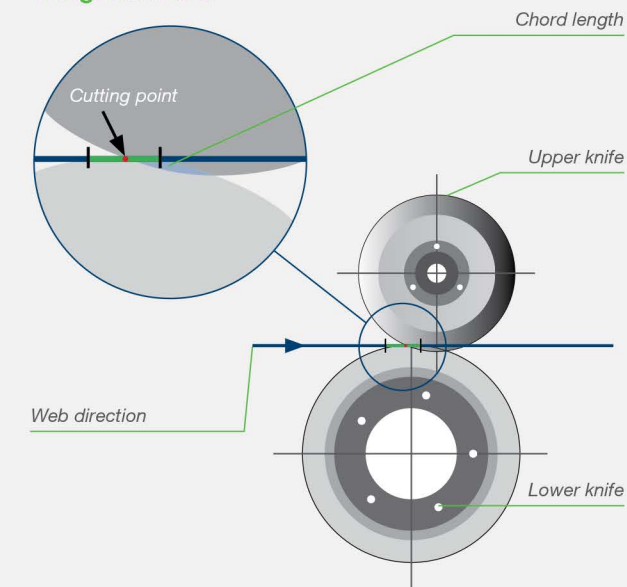
Knife overlapping

The correct adjustment and overlap between the upper and lower knife is very important for a perfect cut.

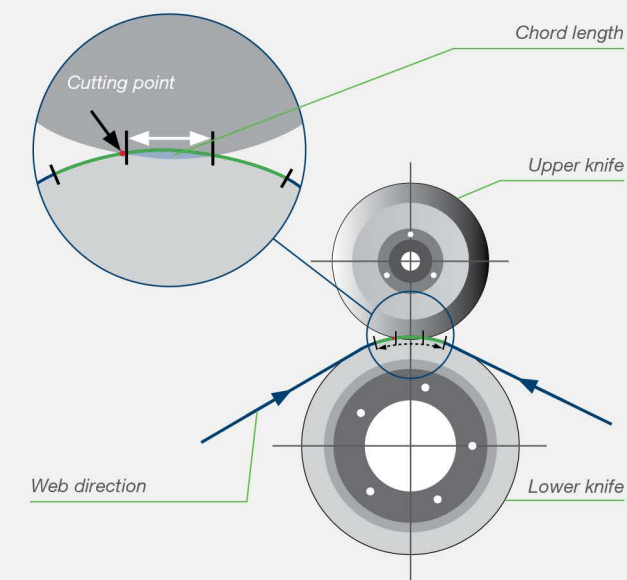
The knife overlap can be checked with the TKM setting gauge/chord tool.

An overlap of approx. 1 mm between the upper knife and lower knife or a chord length of approx. 15 mm to 20 mm is recommended for optimal cutting results.

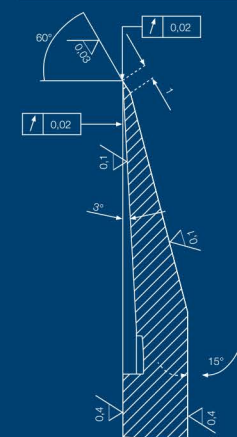
Tangential cut



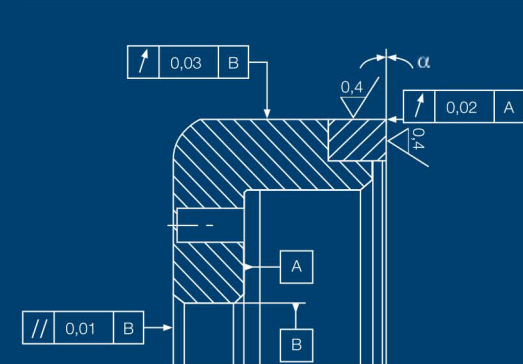
Wrap cut



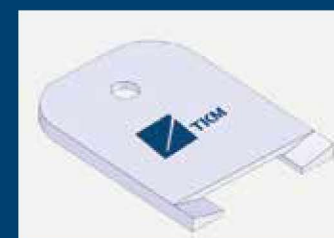
Upper knife



Lower knife



Setting gauge/chord tool



For optimal knife overlapping

Knife overlapping

Lower knife	Upper knife					
	200	190	180	170	160	150
260	0.7	0.8	0.9	1.0	1.1	1.2
240	0.8	0.9	1.0	1.1	1.2	1.3
220	0.9	1.0	1.1	1.2	1.3	1.4
200	1.0	1.1	1.2	1.3	1.4	1.5