

**1ST PLACE**  
AT THE  
**LIGNA**  
INNOVATION AWARD 2013

**AKE**  
Cutting & better



**NEW**

**SuperSilent - Specifically for the vertical panel sizing saw**  
*EASIER. MORE EFFICIENT. FIRST-CLASS.*

**PRODUCT RANGE FROM 2016**



red**dot** award 2014  
honourable mention

***SuperSilent***

**SuperSilent**

*The Glory of Silence*



## **-20 DB REDUCED NOISE LEVEL -75% LOWER VOLUME POSSIBLE**

If the noise level is reduced by 20 dB this means that the volume will go down by 75%, the sound pressure even by 90% and the sound intensity by 99%.

With idle running and no disturbing periphery a level of less than 75 dB(A) can be achieved.

## **MUCH LOWER RISK OF INJURY THANKS TO MicroGeo®**

New standards in terms of safety at work thanks to patented MicroGeo® technology:

There is hardly any cutting pressure: "You are sawing as if through butter".

Almost no rebound during work, flying material parts are a thing of the past.

Effortless sawing of extremely thin ledges.

Despite the very sharp cut hardly any danger of injury when handling the tool.

HEARING

**-99%  
SOUND INTENSITY**

**REVOLUTIONARY:  
AS QUIET AS  
A VACUUM CLEANER**

FEELING

**SHARP AND SAFE –  
HARDLY ANY CUTTING  
PRESSURE.**

**SAFE @WORK® BY AKE**



**SuperSilent**

*The Glory of Silence*



## CUTS SIMPLY EVERYTHING BRILLIANT CUT

The *SuperSilent* is THE universal tool that lives up to its name.

It cuts simply all wood-based material such as chip board, MDF or plywood continuously. Even so, if coated on both sides.

Especially planed dry solid wood can be processed in unprecedented quality with longitudinal cuts and cross cuts.

Even abrasive material such as laminate does not pose any obstacle for this tool.

SEEING

THE UNIVERSAL TOOL

VERY  
EASY-CUTTING

EXTREMELY THIN



## EXTREMELY EFFICIENT LASTS FOR AGES\*

The high-quality diamond cutting material ensures a long tool life and excellent cutting results – at remarkably low costs per cut.

Moreover, down-times for laborious tool changes and investing in a full range of circular saw blades is no longer necessary.

Even tedious fine adjustments of the scoring blades are a thing of the past.

MARVELING

LONG TOOL LIFE

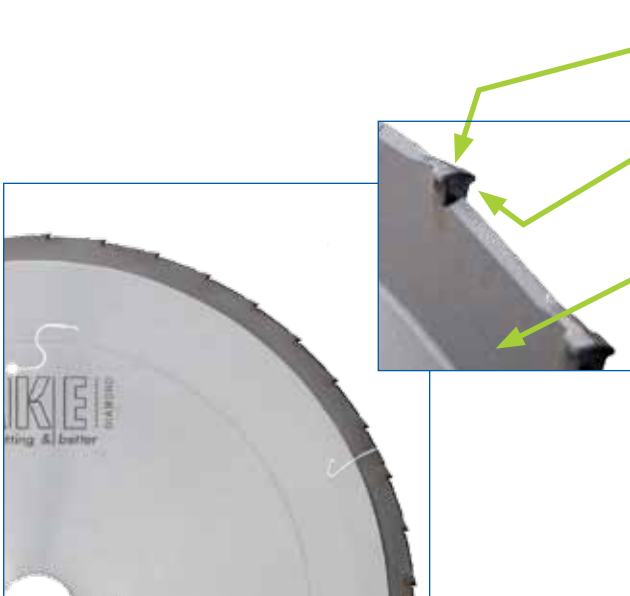
LOW COSTS PER CUT

\* if compared to TC-tipped or un-tipped circular saw blades

## SuperSilent

### Functional Principle

#### Functional principle of a SuperSilent circular saw blade



Innovation: High-quality diamond tooth with MicroGeo®

Innovation Direct-Chip-Guide®: Underneath the “T-arm” the chips are directly guided to the ChipBelt®

Innovation ChipBelt®: For an efficient chip removal

#### Properties of chips:

This new type of saw body with Direct-Chip-Guide® design and MicroGeo® technology ensures that the chips are specifically guided to the ChipBelt®.

The conventional gullet is thus superfluous. This principle works even with a rather big amount of chips, arising for example when cutting stacks of panels.

#### ► NO multiple machining

The patented functional principle works so efficiently, that 9/10 of all chips are directly guided to the chip surface.

Multiple machining can thus be avoided almost completely.

#### ► HARDLY ANY friction

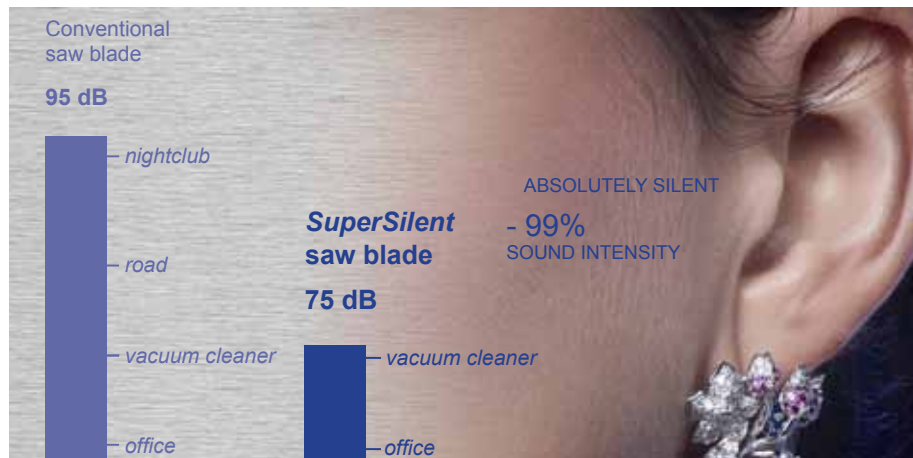
Only 1/10 of the chips still move towards the saw body. This ensures the very stable running and contributes to a clean cutting result.



Air turbulences can be reduced to an absolute minimum in the homogenous ChipBelt® chip surface. As a result the sound level is up to **20 dB** lower, which corresponds to a noise reduction of **75%**.

## SuperSilent

### Revolution of Loudness



- Noise level reduction by up to -20 dB possible
- Reduction of loudness by 75%
- Reduction of acoustic intensity by 99%
- With idle running a level of less than 75 dB(A) can be achieved

## CONVINCING

- **Reduction of loudness by 75%**
- Just about as noisy as a vacuum cleaner: 75 dB(A) possible with idle running
- **Noise level reduction by up to -20 dB**
- THE universal tool: All wood-based panel materials such as chip board, MDF or plywood – even with coating – can be processed lastingly.
- **Suitable for planed dry solid wood**  
– longitudinal cuts as well as cross cuts
- Brilliant cutting results
- **Only little waste with kerfs from 2.0 mm**
- Time and money for tiresome tool changes reduced to a minimum
- **The tedious fine adjustment of the scorer is no longer necessary**
- High quality diamond cutting material
- **Long service life of the tool**
- Exceptionally low costs per cut
- **Even longer tool life thanks to the possibility of re-sharpening up to 2 times**
- Almost no cutting pressure
- **Unprecedented work with virtually no rebounding**
- Hardly any risk of injuries during handling



## LIGNA

The LIGNA in Hanover is worldwide the most important fair for the wood processing industry. This year the specialist for carbide tools and saw blades, AKE from Balingen-Engstlatt, caused a sensation. „AKE re-invents sawing“ was the self-confident statement. Both the press and trade professionals were consequently curious.

The crowds during the live presentations at the AKE stand in hall 26 never ebbed away. Three times a day visitors were flocking to the presentation of the SuperSilent in order to convince themselves, whether there really is a revolution in terms of saw blades – and they had been anything but disappointed: „Man!“, „...an unbelievable cutting surface in solid wood...“, „...feels as if it had been planed rather than sawn...“, „...wouldn't have considered such a perfect exit edge in MDF possible without a scorer...“, „...you really don't hear the saw any more...“, were the typical comments each and every day. SuperSilent did satisfy the high expectations and often even exceeded them. The managing director, Mr. Alexander Knebel, declared himself more than satisfied: „There is a real run on the SuperSilent. We register an unbridled demand for the currently most efficient tool in our product range. We obviously set new standards.“ The expert panel for the Ligna Innovation Award 2013 is apparently of the same opinion - ranking the SuperSilent first.

**Even after the LIGNA show AKE and the SuperSilent are still being talked of and there is hardly any trade magazine not reporting enthusiastically about this world's first:**



[...] Ultra-silent, as clean as a scalpel, closed as a cutting disc: AKE showed a new type of saw blade on the occasion of the LIGNA. [...]. This blade has been further developed since the LIGNA and can now be re-sharpened once. After approximately 5,000 meters' performance the blade may need to be sharpened – depending on the type of material. After that another 4,000 meters are easily available on top. [...]

Source: Article from the trade journal dds, 07 / 2013



[...] Lower noise, sharper, safer... [...] AKE succeeded in combining a completely new round body design with micro diamond tips. This is how the 75-dB(A) level could clearly be undercut if running with idle running and at more than 4,000 rpm... [...] Another advantage is the versatility and long tool life of the »SuperSilent«. It provides the advantage of working without tool change. The operator simply cuts all types of wood-based material such as chip boards, MDF or solid wood with only one blade and always with constant precision. [...]

Source: Article from the trade journal Bauelemente Bau 6-7 / 13

### HOLZDesign

[...] Ultra-silent, flexible, splendid [...] For the past few months people with somewhat dusty hands and a disbelieving expression have regularly been leaving the head office of AKE Knebel in the Swabian town of Balingen. [...] The service life was more than ten times longer than with conventional high-quality carbide-tipped saw blades. Moreover, the saw blade was thus flexible, that beech wood end grain could be cut just as well as spruce along the grain, plywood or coated MDF. This sounds like the total fulfilment of a saw blade wish list of joiners, wood dealers and professional furniture manufacturers. [...]

Source: Article from the trade journal HOLZDesign 010/2013



[...] Ultra-silent and precise [...] Interesting as well: Despite the sharp cut there is hardly any risk of injury during handling. [...] Draw-in forces or ejection forces while sawing are barely developing, which means that the user enjoys rebound-free and safe sawing. The quality of both the entry edge and exit edge is very high. Thanks to the new design, featuring a high bending stiffness, the saw kerf could be reduced by more than 1/3 to 2 mm. [...]

Source: Article from the trade journal BM 7/2013



[...] the straightforward idea bears the brilliant solution [...] These specifically adjusted blades do certainly have a right to exist. In practice a multi material saw blade that cuts everything from soft wood (longitudinal) to both sides coated worktop material for a long time with consistently high cutting quality and low noise is, however, lacking. Ideally this should also be affordable. Amazingly enough: A|K|E managed to combine all these features in the new SuperSilent. I am therefore convinced that the company of A|K|E was rightly placed first with this year's new items' competition. [...] But you have to be prepared to slaughter „sacred cows”: Tiny mouse teeth instead of 20 times' resharpening? No problem with a diamond knife. On the whole this is even more favourable, because the service life is many times longer and the cost for frequent re-grinding of a carbide-tipped blade do not apply. [...]

Source: Article from the trade journal HOB 09 / 2013





[...] Quiet now [...]

The end to screeching circular saw blades. It is a paradigm shift: This circular saw blade does not have any gullet, only 2 mm kerf and, above all, does not make any noise. Moreover, it does cut everything – from MDF to beech cross cut wood [...] This may be changing joiners shops and carpenters shops permanently, because the SuperSilent do not only look different – they especially sound different. [...]

Source: Article from the trade journal Holzkurier 51-52 / 2013

For the complete articles and further information concerning the *SuperSilent* please visit our webpage: [www.ake.de/supersilent](http://www.ake.de/supersilent)

## The SuperSilent versions by comparison „Select“ & „Universal“

The SuperSilent versions by comparison		
Performance with ...	 SuperSilent 2 „Select“	 SuperSilent 3 „Universal“
Sizing of large panels	0	++
Processing high-strain types of material	0	++
Finish cut quality*	++	++
Planing cut quality**	+++	+
Mitre cuts	++	++
Others ...	SuperSilent 2 „Select“	SuperSilent 3 „Universal“
Regular sharpening cycles	1x	2x
Noise generation***	+++	+++
Material savings***	+++	++
Machine precision requirements	heightened	normal
Accuracy requirements in action	heightened	normal

\* Depending on the material possibly with scorer

\*\* requires a low-vibration and serviced machine and peripheral equipment

\*\*\* Compared to standard circular saw blades



## SuperSilent 2 „Select“

*For precise cuts in low-strain types of material.*

*Planing cut quality possible. Extremely high material savings.*



7821

APPLICATION:	Longitudinal cut, cross cut, planing cut
MATERIAL:	Wood-based material raw and coated, planed dry solid wood
MACHINE:	Sizing circular saws with scoring aggregate
DESIGN:	ChipBelt®, safe@work®, low noise, reduced cutting pressure
TOOTH:	MicroGeo®, Direct-Chip-Guide®-Design, DP



### Advantages of SuperSilent 2

- **Universal: processing of wood and wood-based materials**
- **Brilliant cutting result**
- **Planing cut quality with solid wood**
- **75% quieter than standard circular saw blades**
- **Extremely economical by means of 1 time re-sharpening**
- **Maximum material utilisation due to 2,0 mm kerf**

For all facts please refer to the table on the left

#### Main saw blade

D mm	B mm	b mm	d mm	NL mm	Z	Item no.
303	2,00	1,80	30	2/7/42 + 2/9/46,5 2/10/60	43	7821.303.30

## SuperSilent 3 „Universal“

*For first-class cutting results even in high-strain types of material. Particularly suitable for sizing large panels. Even more efficient due to second re-sharpening.*



7821

APPLICATION:	Longitudinal cut, cross cut, planing cut
MATERIAL:	Wood-based material raw and coated, planed dry solid wood
MACHINE:	Sizing circular saws with scoring aggregate
DESIGN:	ChipBelt®, safe@work®, low-noise, reduced cutting pressure
TOOTH:	MicroGeo®, Direct-Chip-Guide®-Design, DP



### Advantages of SuperSilent 3

- **Universal: processing of wood and wood-based materials**
- **Sizing of large panels much easier**
- **Improved processing of high-strain types of material**
- **Well-known brilliant cutting quality**
- **Incredibly economical: 2 times re-sharpenable**
- **Advanced tooth geometry**
- **75% quieter than standard circular saw blades**
- **Comfortable: Lower requirement on machine alignment**

For all facts please refer to the table on the left

#### Main saw blade

	D mm	B mm	b mm	d mm	NL mm	Z	Item no.
	300	2,40	1,80	30	2/7/42 + 2/9/46,5 2/10/60	43	7821.300.43.30-B24
NEW	350	2,60	2,00	30	2/7/42 + 2/9/46,5 2/10/60	53	7821.350.53.30-B26

## SuperSilent

### For vertical panel sizing saws



7825

APPLICATION:	Longitudinal cut, cross cut
MATERIAL:	Wood-based material raw and coated, planed dry solid wood
MACHINE:	Vertical panel sizing machines
DESIGN:	ChipBelt®, safe@work®, low-noise, reduced cutting pressure
TOOTH:	MicroGeo®, Direct-Chip-Guide®-Design, DP



#### Advantages of the SuperSilent for vertical panel sizing saws

- *Specifically optimized for vertical panel sizing saws*
- *Brilliant cutting result*
- *75% quieter than standard circular saw blades*
- *Universal: processing of wood and wood-based materials*
- *Suitable for sizing large panels*
- *Cutting result entirely without burn marks possible – even with larger cutting heights*
- *Can be combined with SuperSilent scorer on demand*
- *Extremely efficient: 2 times re-sharpenable, thus long tool life*
- *Incredibly favourable operating costs*

	D mm	B mm	b mm	d mm	NL mm	Z	Item no.
NEW	303	2,40	1,80	30	2/7/42 + 2/9/46,5 2/10/60	43	7825.303.43.30

## SuperSilent

### Scoring programme



**7826**

1-piece scorer. Conical ATB tooth with MicroGeo®-design.  
Same functional principle as with a *SuperSilent* main saw blade.

#### For *SuperSilent 2* - „Select“

D mm	B mm	B <sub>2</sub> mm	b mm	d mm	Machine	Z	Item no.
80	2,00	2,40	1,80	20	Felder	12	7826.080.12.20-B24
100	2,00	2,40	1,80	20	Martin, Panhans, Schelling	16	7826.100.16.20-B24
100	2,00	2,40	1,80	22	Altendorf, Panhans, Robland, SCM	16	7826.100.16.22-B24
120	2,00	2,40	1,80	20	Holz-Her, SCM, MAK	20	7826.120.20.20-B24
120	2,00	2,40	1,80	22	Altendorf, Martin	20	7826.120.20.22-B24
125	2,00	2,40	1,80	20	Panhans, Paoloni	20	7826.125.20.20-B24
125	2,00	2,40	1,80	22	Altendorf, Martin	20	7826.125.20.22-B24

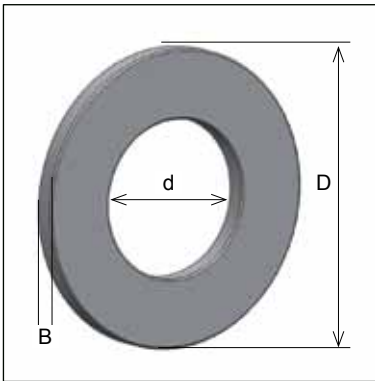
#### For *SuperSilent 3* - „Universal“ and For *SuperSilent Type 7825*

D mm	B mm	B <sub>2</sub> mm	b mm	d mm	Machine	Z	Item no.
80	2,40	2,80	1,80	20	Felder	12	7826.080.12.20-B28
100	2,40	2,80	1,80	20	Martin, Panhans, Schelling	16	7826.100.16.20-B28
100	2,40	2,80	1,80	22	Altendorf, Panhans, Robland, SCM	16	7826.100.16.22-B28
120	2,40	2,80	1,80	20	Holz-Her, SCM, MAK	20	7826.120.20.20-B28
120	2,40	2,80	1,80	22	Altendorf, Martin	20	7826.120.20.22-B28
125	2,40	2,80	1,80	20	Panhans, Paoloni	20	7826.125.20.20-B28
125	2,40	2,80	1,80	22	Altendorf, Martin	20	7826.125.20.22-B28



## SuperSilent

### Reducing rings for circular saw blades



Used for reducing the bore diameter of saw blades. Choose the reducing ring with the appropriate width in order to avoid that the ring will be moved into the flange recess.

The saw blade still has to be sufficiently clamped by the flange, if a reducing ring is applied.

#### Reducing rings for *SuperSilent* main blade

D mm	B mm	d mm	Item no.
30	2,00	15	0591.030.15
30	2,00	15,875	0591.030.87
30	2,00	16	0591.030.16
30	2,00	18	0591.030.18
30	2,00	20	0591.030.20
30	2,00	22	0591.030.22
30	2,00	25	0591.030.25
30	2,00	25,4	0591.030.54

#### Reducing rings for *SuperSilent* scorer

D mm	B mm	d mm	Item no.
20	1,60	12,7	0591.020.07
20	1,60	15,875	0591.020.87
20	1,60	16	0591.020.16
20	1,60	18	0591.020.18
22	1,60	16	0591.022.16
22	2,00	16	0592.022.16
22	1,60	20	0591.022.20
22	2,00	20	0592.022.20

## SuperSilent Accessories



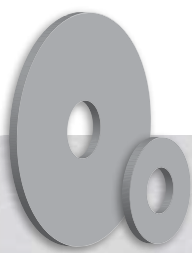
### MULTI-CLEAN TOOL CLEANER

The tool life of the *SuperSilent* is many times longer than with conventional carbide tools. Regular cleaning is therefore very important to ensure that this product can be used for a very long time.

Cleaning does decisively contribute to an optimal tool life and cutting quality. By working with a clean tool you will moreover counteract excessive power consumption of the machine and thus higher energy costs.

Our Multi-Clean tool cleaner is the efficient universal cleaning agent and optimally adjusted to the *SuperSilent*. We therefore recommend to use exclusively the AKE Multi-Clean. It removes resin and severe soiling from circular saw blades, cutters and drills, cleaning quickly and residue-free.

Denomination	Item no.
1 litre spray bottle	8888.000.04
5 litre canister	8888.000.05
10 litre canister	8888.000.06



### SuperSilent - spacer ring

In rare cases a minimum saw body thickness of more than 1.8 mm is required on circular sawing machines for clamping the saw blade. The following spacer rings guarantee that the *SuperSilent* blade can be clamped on these machines as well. If one ring should not be enough, simply apply several ones.

Diameter mm	Bore mm	Thickness mm	NL	Item no.
120	30	0,5	NLK	10185179
75	22	0,5	-	10185180
50	22	0,5	-	10185181

## SuperSilent - Riving knives

### Overview

Altendorf .....	16
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Griggio.....	21
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Kölle.....	22
Martin.....	23
Panhans .....	24
Paoloni.....	25
Putsch Meniconi .....	25
Robland .....	26
SCM.....	27
Striebig .....	28



## ***SuperSilent - Riving knives***

### ***Information***

Please check whether you already have a riving knife that is suitable for the *SuperSilent*. The riving knife must be thicker than the saw body and thinner than the kerf (acc. to DIN EN 1870-1).

We therefore recommend the following riving knife thickness:

- ***SuperSilent D300 / D303 mm = riving knife with 1.9 mm thickness***
- ***SuperSilent D350 mm = riving knife with 2.2 mm thickness***

Make sure to exclusively apply a riving knife with 1.9 mm thickness for diameters of 300 mm and 303 mm. You and your tool will thus be optimally protected. Never use a riving knife with 1.8 mm thickness – it is too thin.

In many cases our riving knives are wider than those of the machine manufacturer. Do not wonder, if our riving knife is larger than the original one. You will thus have added stability for sawing – which is important to avoid jamming of the work piece. We strongly advise against buying a ground riving knife, because it does not have the required added stability.

## HOW DO I FIND THE CORRECT RIVING KNIFE

The following pages describe our riving knife range, which had been specifically optimized for the *SuperSilent*. It includes altogether 47 riving knives of the most popular machine manufacturers. You will easily find the correct one:

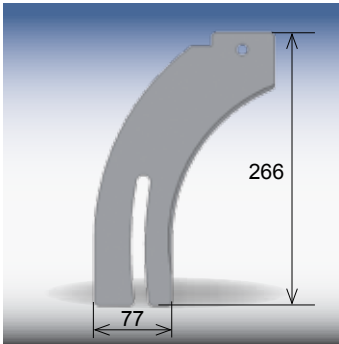
1. Open the riving knife overview of your machine manufacturer on the following pages.
2. The choice can already be narrowed down by means of the riving knife thickness (1.9 mm or 2.2 mm).
3. Based on the picture and the diameter range the correct riving knife can normally be defined very quickly.
4. To be on the safe side: Remove your currently applied riving knife and measure its width and length. Compare these dimensions with those of the drawing.
5. If you should not find a suitable riving knife under your machine manufacturer, please check whether any riving knife of other manufacturers could be applied.
6. Done!

The dimensions refer to the manufacturer's original riving knife. As already mentioned above, we normally deliver a wider riving knife design.

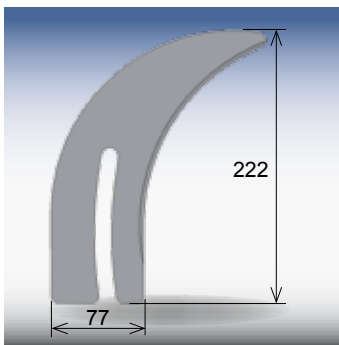
If it should be impossible to identify a suitable riving knife, we will be pleased to help you. Please contact us – we may meanwhile have the required riving knife already in stock.

## SuperSilent - Riving knives

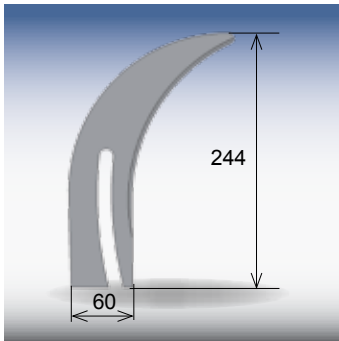
ALTENDORF



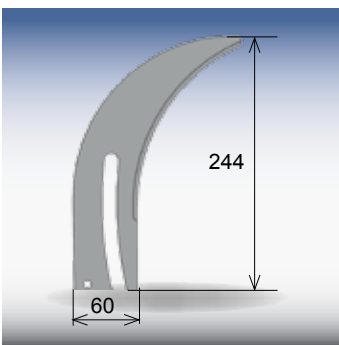
ITEM NO: **10176746**  
 DIAMETER RANGE: 300-315 mm  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10176748**  
 DIAMETER RANGE: 300-315 mm  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10176749**  
 DIAMETER RANGE: 300-350 mm \*  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm

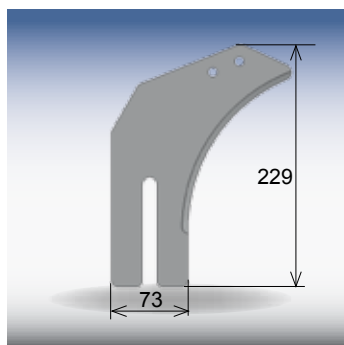


ITEM NO: **10195328**  
 DIAMETER RANGE: 300-350 mm  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm

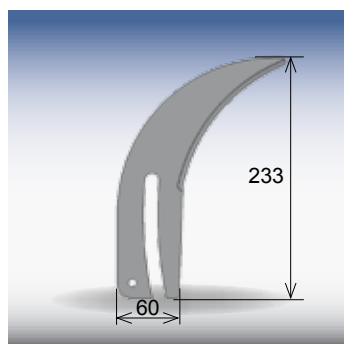
\* This *SuperSilent* riving knife may be applied for saw blade diameters of up to 315 mm max.  
 The a.m. diameter range refers to the machine manufacturer's riving knife applied so far.

## SuperSilent - Riving knives

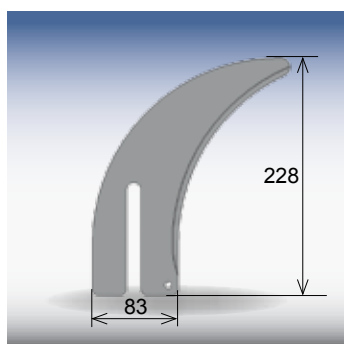
CASOLIN



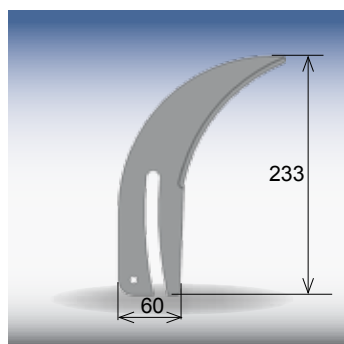
ITEM NO: **10181492**  
DIAMETER RANGE: 250-303 mm  
DESIGN: dust extraction is mounted on the riving knife  
THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
GUIDING SLOT: 13,0 mm



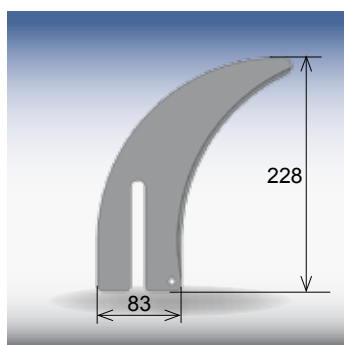
ITEM NO: **10181493**  
DIAMETER RANGE: 300-350 mm \*  
THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
GUIDING SLOT: 13,00 mm



ITEM NO: **10181312**  
DIAMETER RANGE: 300-350 mm \*  
THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
GUIDING SLOT: 13,00 mm



ITEM NO: **10195334**  
DIAMETER RANGE: 300-350 mm  
THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
GUIDING SLOT: 13,00 mm

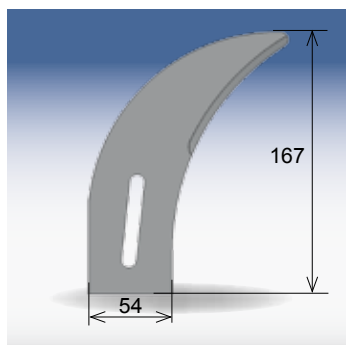


ITEM NO: **10195335**  
DIAMETER RANGE: 300-350 mm  
THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
GUIDING SLOT: 13,00 mm



## **SuperSilent - Riving knives**

**ELCON**



ITEM NO: **10181356**

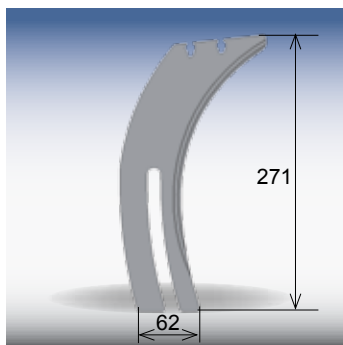
DIAMETER RANGE: 303 mm

THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**

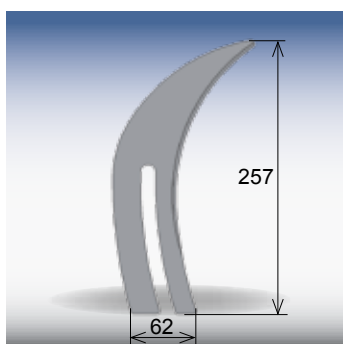
GUIDING SLOT: 9,00 mm

## SuperSilent - Riving knives

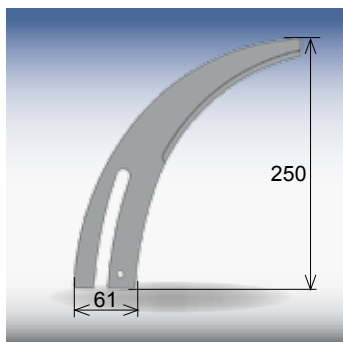
FELDER



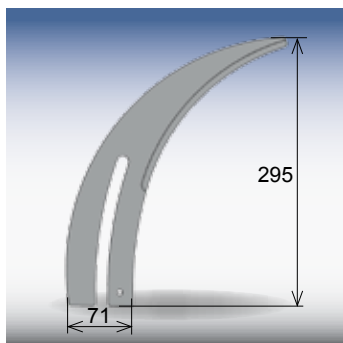
ITEM NO: **10176738**  
 DIAMETER RANGE: 250-315 mm  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10176761**  
 DIAMETER RANGE: 250-315 mm  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10195318**  
 DIAMETER RANGE: 350-400 mm \*\*  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm

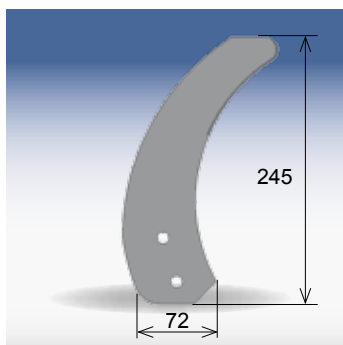


ITEM NO: **10195319**  
 DIAMETER RANGE: 350-450 mm \*\*  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm

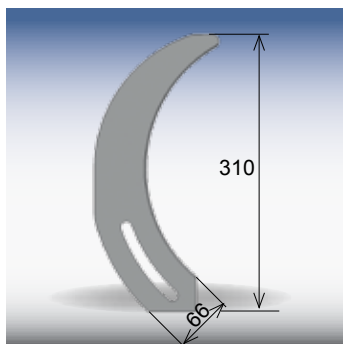
\*\* This *SuperSilent* riving knife may be applied for saw blade diameters of up to 350 mm max.  
 The a.m. diameter range refers to the machine manufacturer's riving knife applied so far.

## **SuperSilent - Riving knives**

### **GMC**



ITEM NO: **10181349**  
DIAMETER RANGE: 292-303 mm  
THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
GUIDING SLOT: 10,00 mm

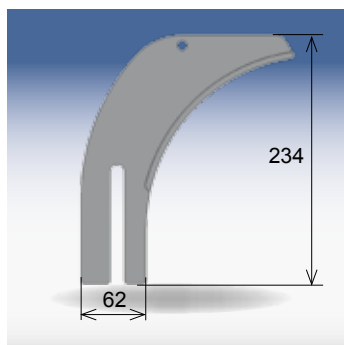


ITEM NO: **10181354**  
DIAMETER RANGE: 303 mm  
THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
GUIDING SLOT: 12,00 mm

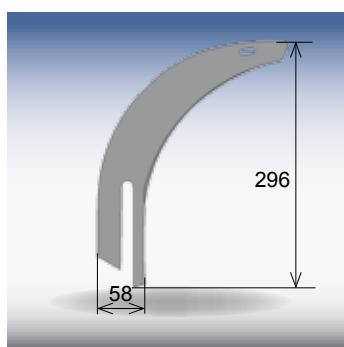


## SuperSilent - Riving knives

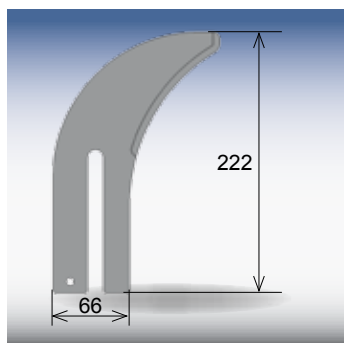
GRIGGIO



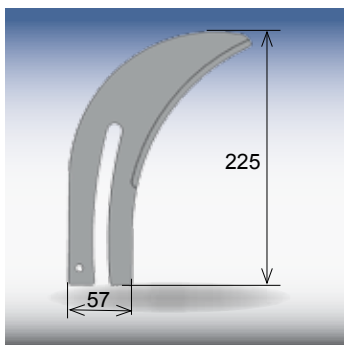
ITEM NO: **10181338**  
 DIAMETER RANGE: 250-315 mm  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10180780**  
 DIAMETER RANGE: 300-350 mm \*  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10181342**  
 DIAMETER RANGE: 250-315 mm  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm

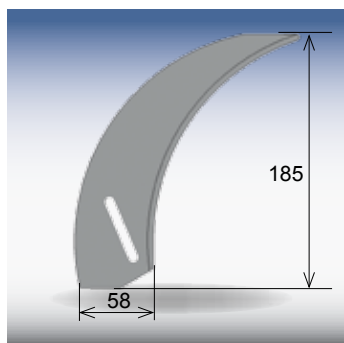


ITEM NO: **10195317**  
 DIAMETER RANGE: 250-350 mm  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm

\* This *SuperSilent* riving knife may be applied for saw blade diameters of up to 315 mm max.  
 The a.m. diameter range refers to the machine manufacturer's riving knife applied so far.

## SuperSilent - Riving knives

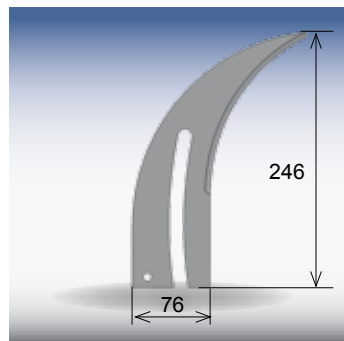
HOLZ-HER



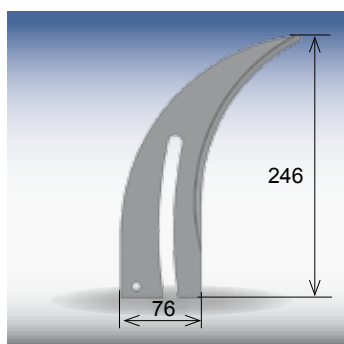
ITEM NO:	<b>10181337</b>
DIAMETER RANGE:	290-303 mm
THICKNESS:	1,9 mm for <b>SuperSilent D300 / D303 mm</b>
GUIDING SLOT:	6,00 mm

## SuperSilent - Riving knives

KÖLLE



ITEM NO:	<b>10177902</b>
DIAMETER RANGE:	250-350 mm *
THICKNESS:	1,9 mm for <b>SuperSilent D300 / D303 mm</b>
GUIDING SLOT:	13,00 mm

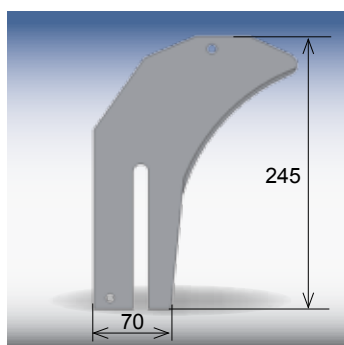


ITEM NO:	<b>10195337</b>
DIAMETER RANGE:	250-350 mm
THICKNESS:	2,2 mm for <b>SuperSilent D350 mm</b>
GUIDING SLOT:	13,00 mm

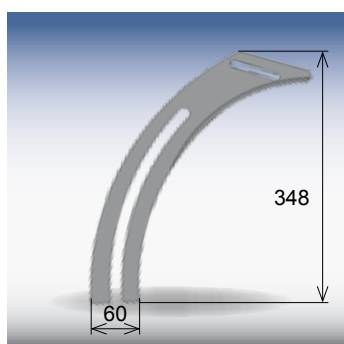
\* This *SuperSilent* riving knife may be applied for saw blade diameters of up to 315 mm max.  
The a.m. diameter range refers to the machine manufacturer's riving knife applied so far.

## SuperSilent - Riving knives

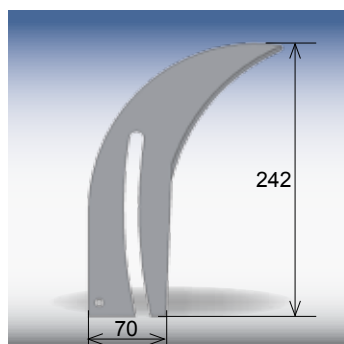
MARTIN



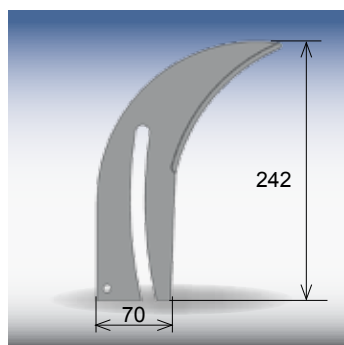
ITEM NO: **10176763**  
 DIAMETER RANGE: 250-315 mm  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10181324**  
 DIAMETER RANGE: 300-350 mm \*  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 14,00 mm



ITEM NO: **10176762**  
 DIAMETER RANGE: 250-315 mm  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm

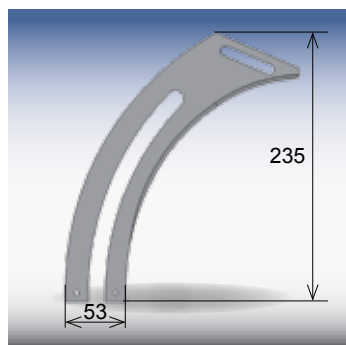


ITEM NO: **10195329**  
 DIAMETER RANGE: 250-350 mm  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm

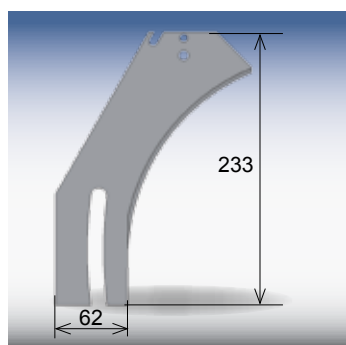
\* This *SuperSilent* riving knife may be applied for saw blade diameters of up to 315 mm max.  
 The a.m. diameter range refers to the machine manufacturer's riving knife applied so far.

## SuperSilent - Riving knives

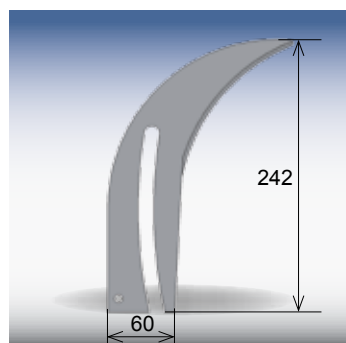
PANHANS



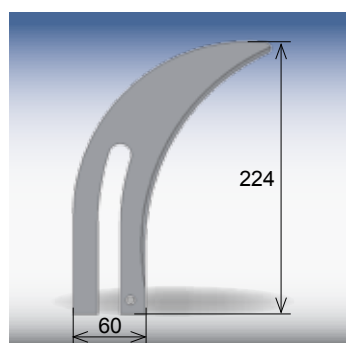
ITEM NO: **10177091**  
 DIAMETER RANGE: 200-303 mm  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 14,00 mm



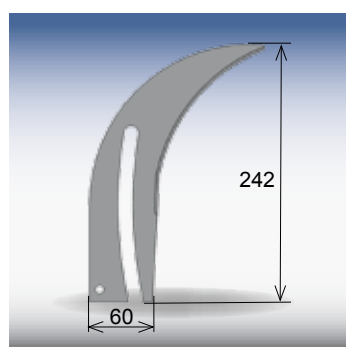
ITEM NO: **10177009**  
 DIAMETER RANGE: 300-315 mm  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10177006**  
 DIAMETER RANGE: 250-350 mm \*  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10177008**  
 DIAMETER RANGE: 250-350 mm \*  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 18,00 mm

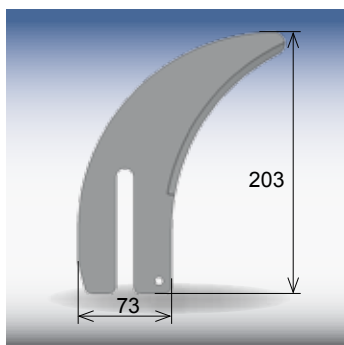


ITEM NO: **10195330**  
 DIAMETER RANGE: 250-350 mm  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm

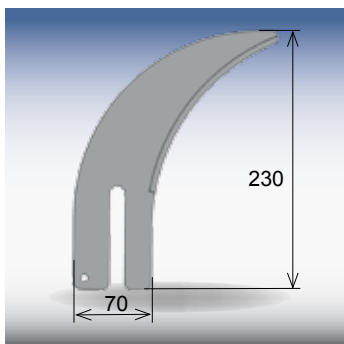


## SuperSilent - Riving knives

PAOLONI



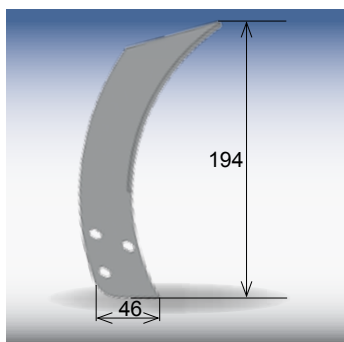
ITEM NO: **10181495**  
 DIAMETER RANGE: 250-315 mm  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10195320**  
 DIAMETER RANGE: 300-350 mm  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm

## SuperSilent - Riving knives

PUTSCH MENICONI



ITEM NO: **10181343**  
 DIAMETER RANGE: 303 mm  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 6,00 mm

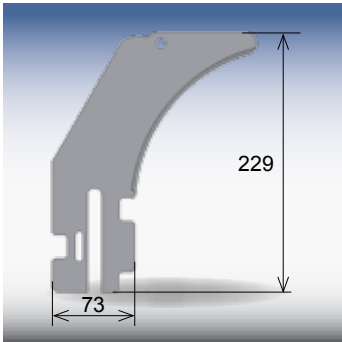
\* This *SuperSilent* riving knife may be applied for saw blade diameters of up to 315 mm max.  
 The a.m. diameter range refers to the machine manufacturer's riving knife applied so far.

PAOLONI

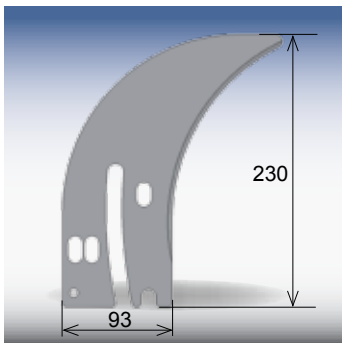
PUTSCH MENICONI

## SuperSilent - Riving knives

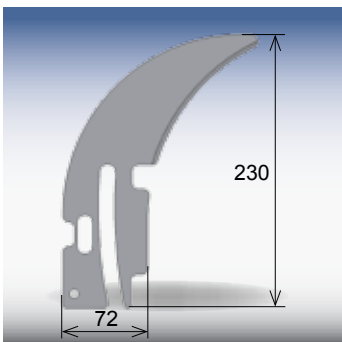
ROBLAND



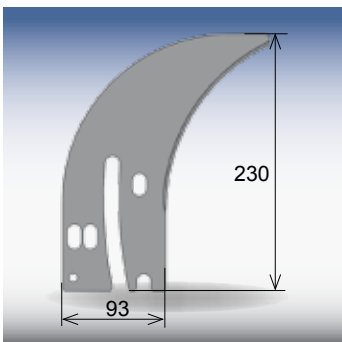
ITEM NO: **10177092**  
 DIAMETER RANGE: 250-303 mm  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 12,00 mm



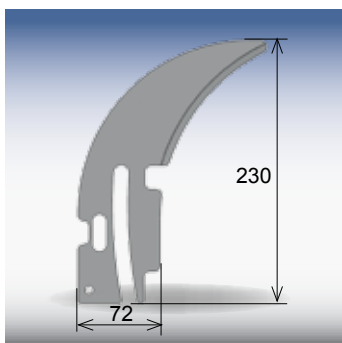
ITEM NO: **10177087**  
 DIAMETER RANGE: 300-350 mm \*  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10177089**  
 DIAMETER RANGE: 300-350 mm \*  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



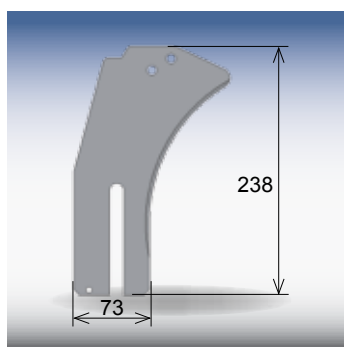
ITEM NO: **10195331**  
 DIAMETER RANGE: 300-350 mm  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm



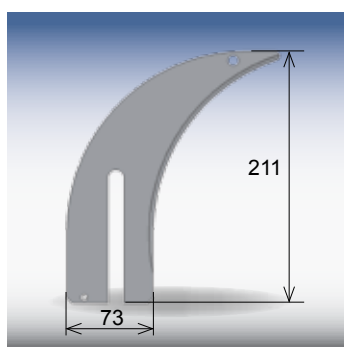
ITEM NO: **10195332**  
 DIAMETER RANGE: 300-350 mm  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm

## SuperSilent - Riving knives

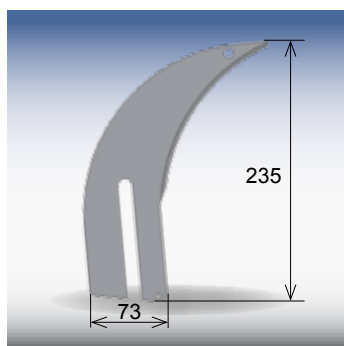
### SCM



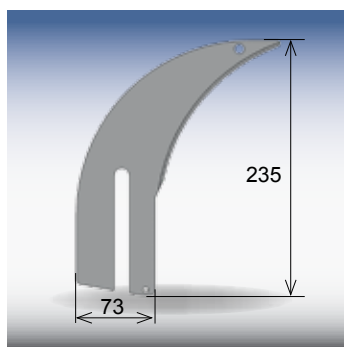
ITEM NO: **10177457**  
 DIAMETER RANGE: 250-315 mm  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10177458**  
 DIAMETER RANGE: 250-315 mm  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm



ITEM NO: **10177456**  
 DIAMETER RANGE: 300-350 mm \*  
 DESIGN: dust extraction is mounted on the riving knife  
 THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
 GUIDING SLOT: 13,00 mm

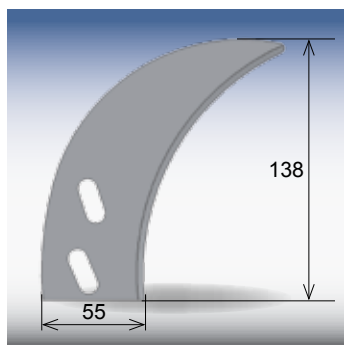


ITEM NO: **10195333**  
 DIAMETER RANGE: 300-350 mm  
 THICKNESS: 2,2 mm for **SuperSilent D350 mm**  
 GUIDING SLOT: 13,00 mm

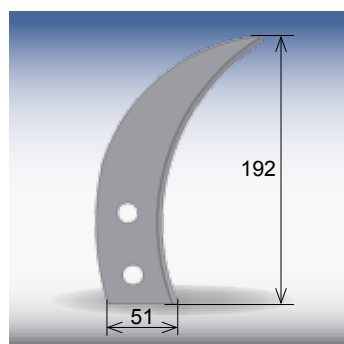
\* This *SuperSilent* riving knife may be applied for saw blade diameters of up to 315 mm max.  
 The a.m. diameter range refers to the machine manufacturer's riving knife applied so far.

## SuperSilent - Riving knives

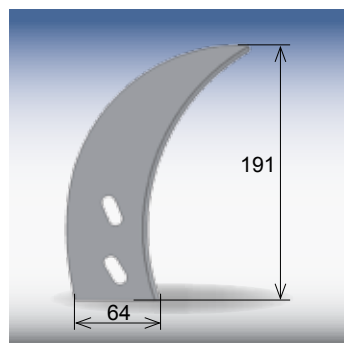
STRIEBIG



ITEM NO: **10176755**  
DIAMETER RANGE: 240-253 mm  
THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
GUIDING SLOT: 10,00 mm



ITEM NO: **10176751**  
DIAMETER RANGE: 290-303 mm  
THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
GUIDING SLOT: 14,00 mm



ITEM NO: **10176754**  
DIAMETER RANGE: 290-303 mm  
THICKNESS: 1,9 mm for **SuperSilent D300 / D303 mm**  
GUIDING SLOT: 10,00 mm

### Tool life & economic efficiency

#### **How long does the *SuperSilent* last? Which tool life can be expected?**

The *SuperSilent* is a diamond-tipped tool. Of all the cutting materials applied in wood-processing industry, diamond is the one with the lowest wear and tear. The tool life is thus many times longer than that of comparable carbide-tipped tools. The price-performance-ratio of diamond is very cost-efficient. With a new blade 5,000 meters' tool life is possible in double-coated MDF. After re-sharpening the tool life can almost be doubled, because 4,000 additional meters will then be possible. With the new version of *SuperSilent* 3 a second re-sharpening cycle is possible, thus increasing the tool life to a total of 13,000 meters.

#### **Is it possible to re-sharpen the *SuperSilent*?**

The *SuperSilent* version 2 can be re-sharpened once, whereas version 3 can be re-sharpened twice. Both the main blade and the scorer can be re-sharpened, provided that the teeth are not damaged and the degree of wear does permit re-grinding. The scorer can potentially even be re-sharpened several times.

#### **How do I know which version of the *SuperSilent* I have?**

This can easily be identified by means of the „2“ or „3“ marked behind the *SuperSilent* - logo on the tool and the different kerf and material number. The scorer and the *SuperSilent* for vertical panel sizing both do not have any figure for identification, but they can nevertheless be re-sharpened.

#### **How much does the re-sharpening cost?**

The main blades Ø 300 and 303 both have 43 teeth, re-sharpening costs € 86.00. With the main blade Ø 350 re-sharpening costs are € 134.00, because of the bigger kerf and higher number of teeth. For the scorer it costs 3.00 € net per tooth. You thus get almost the performance of a brand new tool at a very moderate price. All prices plus VAT.

#### **Where can the re-sharpening be done?**

In order to be able to make unlimited use of the advantages of the MicroGeo®-geometry even after re-sharpening, we recommend to have it done directly at AKE. We will check your tool carefully for damages as well as tension and straighten it expertly. Moreover, it will be cleaned thoroughly.

#### **Is its application worthwhile for me?**

This saw blade is characterized by its versatility. All your hollow teeth, flat teeth, triple-chip/flat teeth and ATB teeth blades can, as a rule, be replaced without any problems even with different numbers of teeth. The *SuperSilent* is suitable for replacing several other saw blades. Moreover you save the time required for frequent tool replacements. The investment is therefore always worthwhile. The costs per cut are much lower than with conventional saw blades.

#### **What can I do, if a diamond tip has to be replaced on the *SuperSilent*?**

If a diamond tip broke off or had been damaged severely it can be replaced by us. The costs for such a tip replacement are EUR 19.00 per tip with the main blade. Parallel to the tooth replacement the *SuperSilent* will have to be re-sharpened. Only then will the optimal cutting quality be achieved. For the costs for re-sharpening please refer to „Which are the costs for re-sharpening?“. All prices are plus VAT.





## SuperSilent FAQ

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### Technology

#### **Which cutting material is applied on the *SuperSilent*?**

A high-quality diamond cutting material is used on all *SuperSilent* main blades and scorers, just as the type of material applied for high performance processing in industry. As a result you produce an excellent cutting quality and experience a particularly long tool life – the diamond tips are thus contributing to an outstanding economic efficiency.

#### **How high is the cutting pressure?**

The cutting pressure is much lower than with comparable carbide-tipped or diamond-tipped circular saw blades.

#### **This saw blade has no gullet, does that really work?**

Yes, and very well in fact. The *SuperSilent* is equipped with the MicroGeo®-tooth geometry which guides the chips with the aid of the Direct-Chip-Guide®-technology safely and purposefully to the innovative chip belt. A clean chip removal and thus an outstanding cutting quality are achieved. The principle of this new chip guidance is patented.

#### **On which machine types can the *SuperSilent* be applied?**

The *SuperSilent*-circular saw blades of type 7821 can be applied on bench saws and sizing circular saws. Especially for vertical panel sizing saws the *SuperSilent* type 7825 had been developed and optimized. Both refer to machines with manual feed. It is possible to apply these blades on other machines as well, but this has to be inquired individually.

#### **Is it possible to apply the *SuperSilent* on machines with mechanic feed**

The *SuperSilent* is currently only designed for manual feed.

#### **Can the saw body be straightened again?**

Yes, re-straightening the saw body is possible without any problems.

#### **Which tooth geometry does the scorer have?**

It is a conical scorer with ATB geometry, based on the MicroGeo®-technology of the *SuperSilent*. Even fibrous material such as solid wood can thus be processed without any problems.

### Material mix

#### **For which field of application is the *SuperSilent* particularly suitable?**

For universal application in dry and planed solid wood and wood-based materials. This means everything from MDF board and chip board to plywood and solid wood can be processed. Even single-sided and double-sided coatings do not pose any problem. In solid wood both longitudinal cuts and cross cuts can be carried out. Very abrasive and tool wearing types of material such as, for example, laminate can be processed with this tool just as well. Moreover, „Version 3“ and type 7825 are especially suitable for sizing large panels and processing high-strain material.

#### **Is it possible to apply the *SuperSilent* for finish cuts?**

Yes, this is actually where the *SuperSilent* exploits its full potential.

#### **Is it possible to apply the *SuperSilent* for planing cuts?**

Yes, this does, however, require a low-vibration and perfectly serviced machine and peripheral equipment. For an optimal planing cut we recommend to apply Version 2.

#### **Which exit edge quality can be expected with wood based panel material, coated on both sides?**

In MDF with double-sided coating excellent exit edges can be expected, depending on the applied feed rate and machine status. Leave your hollow tooth blade confidently on the bolt. When you are cutting chip boards with double-sided coating the exit edge primarily depends on the quality of the chip board. If the chips are pressed too loosely they tend to tear and damage the top coat. We therefore recommend to always apply the *SuperSilent*-scorer.

### What can I do, if the cutting quality gradually decreases?

The reduced cutting quality of the tool does not necessarily mean, that the tool cannot be used any more. Once the maximum possible number of re-sharpening cycles will have been done we recommend to apply this tool then for cutting abrasive materials – e.g. laminate.

### What happens, if stone or other foreign matter is being cut?

Stone and foreign matter is detrimental to any tool – including the *SuperSilent*. This may lead to the total failure of the tool.

### Is it possible to process non-ferrous metal or steel with the *SuperSilent*?

No, non-ferrous metal (such as aluminium, copper and brass) and steel cannot be cut. However, AKE does, of course, offer high-quality circular saw blades for processing non-ferrous metal and steel, too. Please contact us!

### For which fields of application is the *SuperSilent* „Select“ (= Version 2) recommended and what is the *SuperSilent* „Universal“ (= Version 3) ideal for?

The *SuperSilent* „Select“ with a kerf of 2,0 mm is particularly recommended, if you want to make full use of the advantages of the *SuperSilent* technology in terms of planing cut and material utilisation. When applying the „Select“ special care must be attributed to the work piece guidance and the machine should be adjusted precisely. With the *SuperSilent* „Universal“ the applied kerf is 2,4 mm. It is therefore especially suitable for processing large panels and high-strain types of material (solid wood only dried and planed). The saving of material is still substantial and, in addition, re-sharpening can be done twice. The requirements on machine precision and diligence in use are normal.

## Noise generation & working safety

### How much noise does the *SuperSilent* generate?

This saw blade is extremely quiet. A noise reduction by minus 20 dB(A) as against conventional saw blades is possible. This corresponds to a reduction of the perceived loudness by 75% and a reduction of the acoustic energy by 99%.

### Will I no longer need any ear protection, if the blade works at such low noise?

Despite the extremely reduced noise level we still recommend to use ear protection.

## Application

### What do I have to observe when applying the *SuperSilent*?

The *SuperSilent* is a filigree precision tool with a width of only 2.0 mm (= version 2) and thus particularly suitable, if high demands are made on the cutting quality. This should always be observed when working with this tool. Do not use this blade for rough cuts in solid wood with high internal stress (planks, not planed material etc.) or if the work piece does not rest flatly on the machine.

Make sure the material feed is always parallel to the tool. This means the material may never be pushed towards the saw blade, but always parallel past the saw blade. There may otherwise be transverse forces with an impact on the tool thus leading to unwanted thermal interference. As a consequence the blade may be vibrating and eventually failing completely. The *SuperSilent* Version 3 and type 7825 are compensating the transverse forces much better due to their additional clearance, thus facilitating the operation.



## SuperSilent

### FAQ

#### **I cannot get through the material when sawing. What is the matter?**

If the *SuperSilent* does not manage to get through the material this is - as experience has shown - due to multiple clamping of the material. The material will have no freedom left for deviating which means the tool gets stuck. During operation the work piece may therefore not be clamped simultaneously in various ways. This can, for example, be the case, if the parallel stop is pushed far beyond the saw blade. The work piece cannot deviate laterally, because on one side the parallel stop is the obstacle, on the other side the operator is possibly pushing transversely against the work piece. The same situation arises, if pressure beams and wrongly positioned parallel stops are applied.

Tip: If the blade should actually be jammed, the first step is to push the parallel stop back. Take the measurements first, then work without parallel stop.

#### **The tool vibrates during application. What happened?**

Whenever a saw blade vibrates, the saw body is thermally influenced. The workpiece touches the saw body during the cut and the body is subsequently heating up.

Take care that the workpiece is always pushed "parallel past the saw blade" rather than „towards the saw blade“ as already described above. The tool is thus in the position of cut itself free, any contact is then avoided.

Tip: Never put your hands laterally on the workpiece, you will then tend to push the workpiece towards the saw blade. A position near the saw blade should be favoured, this makes it much easier to push parallel to the tool. Make sure to leave sufficient space between your hands and the sawblade for reasons of work safety. Do not push the workpiece too far ahead, a parallel feed is then next to impossible.

#### **Further questions „around the SuperSilent“**

##### **Where do I get the *SuperSilent*?**

Through the specialised trade or directly from AKE, depending on the sales area. Please contact us via webform on [www.ake.de](http://www.ake.de). We will be informing you about the contact details of the AKE - specialist dealer in your region.

##### **I have so far been using a two-piece scorer. Will the changeover to a one-piece scorer bring about any specific benefits?**

The advantage of our one-piece scorer is its perfect adjustment to the main blade. It does not have to be tuned and – combined with the *SuperSilent* main blade – it convinces with its very easy operation.

##### **I do already have a scoring blade. Do I need another one in *SuperSilent*-design?**

In principle any conventional one-piece or two-piece scorer can be applied together with the *SuperSilent*-main blade, provided that the scorer can be adjusted to the respective *SuperSilent* kerf. We do, however, recommend to change to the *SuperSilent*-scorer, because with the double pack (main blade & scorer) all advantages can be utilised. The one-piece scorer specifically designed to suit the main blade, tedious tool adjustments of a two-piece scorer are thus not necessary. As the scorer has also been constructed according to the *SuperSilent*-technology it does cut at a very low noise and, thanks to the diamond tips, for a long time and extremely efficiently. The change is therefore at any rate worthwhile.

#### **Riving knives**

##### **Why do I need a separate riving knife for the *SuperSilent*?**

This is due to the small saw body thickness. When choosing the correct riving knife thickness the general rule is, the riving knife should be thicker than the saw body and thinner than the kerf. For *SuperSilent* blades Ø 300 and 303 mm you therefore need, for example, a riving knife which is thicker than 1.8 mm, but thinner than 2.0 mm resp. 2.4 mm.

##### **So what is the suitable riving knife thickness?**

We recommend to apply a riving knife with 1.9 mm thickness (for Ø 300 and 303 mm) resp. 2.2 mm (for Ø 350 mm). You yourself and your tool will then be optimally protected. Never use a riving knife with 1.8 mm thickness for Ø 300 / 303 mm, because you work with increased safety with our 1.9 mm design. Moreover, most of our riving knives are wider than the original riving knives of the machine manufacturers, thus providing increased stability.

**Where do I get a riving knife with 1.9 mm or 2.2 mm thickness?**

In order to make things as easy as possible for you, we are directly offering a range of riving knives particularly optimised for the *SuperSilent*. For a topical overview of available riving knives please have a look at our *SuperSilent*-catalogue on our webpage.

**Is it possible to use my riving knife with 1.9 mm thickness for the *SuperSilent* Ø 350?**

No, it is too thin.

**Is it possible to use my riving knife with 2.2 mm thickness for the *SuperSilent* Ø 300 / 303 mm?**

If you are working with the *SuperSilent* version 2, this riving knife cannot be applied. Combined with “Version 3, Ø 300” or “Type 7825, Ø 303” the riving knife can theoretically be applied, because these tools have a kerf of 2.4 mm. The protrusion between riving knife and kerf would, however, be very small with only 0.1 mm on each side. We therefore recommend to continue applying our riving knife with 1.9 mm thickness

**I am afraid I cannot find a suitable riving knife in your programme. What next?**

If a suitable riving knife cannot be found, we will be pleased to help you. Please contact us – the required riving knife is possibly in stock meanwhile.

**I received a riving knife from you. Why does it look completely different compared to the previously applied riving knife?**

Our riving knives are in most cases wider than the original riving knives of the machine manufacturers are. No need to worry, because our riving knife is bigger than the original ones. This does in fact provide additional stability – an important feature to avoid jamming of the workpiece. We strongly advise you against purchasing a ground riving knife, because this does not provide the added stability.

**My riving knife has been jamming ever since the first cut. How can I avoid that?**

When designing a saw the machine manufacturers take account of a line between the centre of the saw blade and the centre of the riving knife. This fictional centre line refers to conventional tools with the usual tooth protrusion. The *SuperSilent* has a thinner saw body and a comparatively small tooth protrusion of only 0.1 mm (e.g. Version 2). With some machines the riving knife is thus no longer in line with the saw blade. If the riving knife is off-centre as against the saw blade this may lead to jamming. This mismatch can be corrected by means of a rust-free foil underneath the riving knife. Alternatively the position of the riving knife can be changed on many machines by means of screws on the riving knife holder.

## Notes



[illegible]

**be *better***



**feel *better***



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