

TEXTILES. FASHIONED BY HEUSCH.





HEUSCH. SPECIALIST FOR CUTTING TECHNOLOGIES. SINCE 1850.

WHAT MARKS A HEUSCH TEXTILE SOLUTION?

THE BASIC MATERIAL.

All Heusch cutting tools are manufactured from high quality steels. Steels that fit the shearing requirements optimally.

THE MANUFACTURING PROCESSES.

Heusch shearing products are manufactured from raw steel in unique procedures. These procedures ascertain that the products develop the desired shearing properties

QUALITY ASSURANCE.

The raw steel is constantly checked for the correct properties. Also the finished products. Thus we can guarantee best quality at all times.

WHAT MARKS HEUSCH?

WORLDWIDE.

Close to you. Represented in more than 100 countries with our traders' network.

So that you have a contact partner close by.

PROGRESSIVE.

Always keeping pace with time. We are continuously developing our products further.

So that you can always achieve best results.

SOLUTION ORIENTATED.

If you have any questions and face new challenges: Talk to us. We are sure to find a good solution.

STRONG IN SERVICE.

No matter what you are asking. We will listen und support you. Use our Service Center in Aachen or at other locations.

WHAT TYPE OF FIBRES CAN BE SHEARED BY HEUSCH TEXTILE SPIRALS?

NATURAL FIBRES

- Cotton
- Wool
- Silk
- Sisal
- Coconut
- ...

SYNTHETIC FIBRES

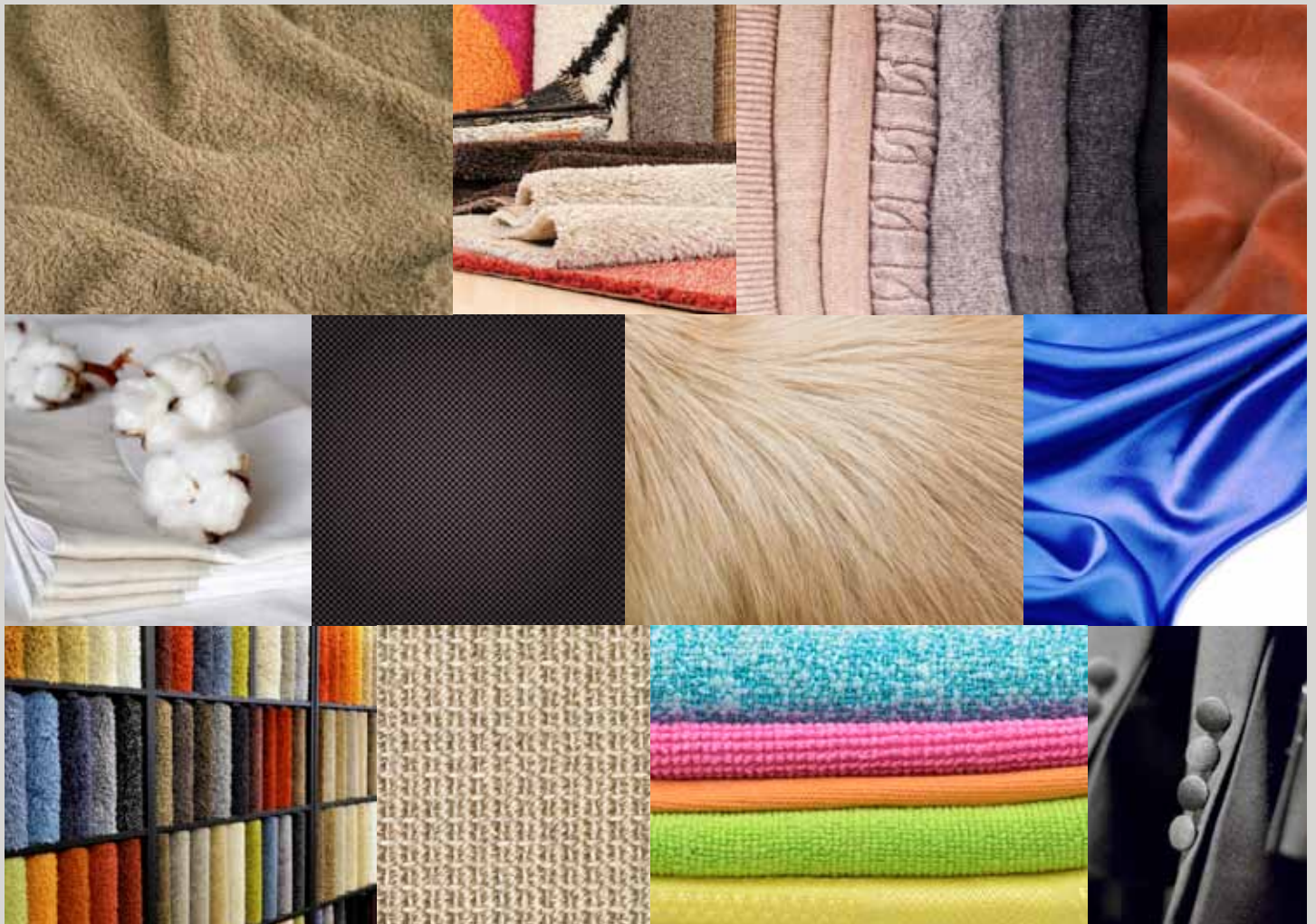
- Polyamide
- Polyester
- Polyacrylic
- Spandex
- Carbon
- ...

WHY IS THE MATERIAL SHEARED?

- To give the surface the desired optic and haptic
- Increase the colour intensity
- Cleaning the material
- Open up the loops (Terry)
- Removes threads from embroideries
- Smoothing the surface

WHAT DOES THE SHEARING RESULT DEPEND ON?

- Attaching the spiral on the cylinder
- Number of file cuts
- Type of ledger blade
- Condition of ledger blade
- Overall adjustment of shearing unit
- Speed of the textile material passing through
- Tension of fabric
- Condition of fabric before shearing



TEXTILE SPIRALS

WHICH SPIRAL SHOULD I USE?

HEUSCH manufactures various textile spirals.

For the perfect fit of the spiral according to your requirements please select from the following 4 basic properties:

TYPE OF SPIRAL

FIXING THE SPIRAL

NUMBER OF FILE-CUTS

THICKNESS OF SPIRAL

We are happy to help selecting.

TYPE OF SPIRAL

CONCAVE - OR CAULKED SPIRAL?

For most materials we recommend the concave spiral invented by us. It distinguishes itself by its optimal cutting angle of 25°. The caulked spiral is only recommended for particularly heavy products (carpet).



CONCAVE SPIRAL

consistently optimal cutting angle of 25°

MATERIAL THICKNESS	1,5 MM for light to medium-heavy products	2 MM for heavy products
FILE CUT	no file cut, 13, 15, 18	9, 11, 13
LENGTH	any length is possible within this range: 250 up to 8000 mm	

Machine manufacturer

Anhui Laifu, Anmak, Bitexma, BROMA, Capdevilla, Caru, Changzhou KunLiang, Changzhou Machinery Works, Changzhou ShengWang, Changzhou TongYue Machinery, Chien Lun, Cogliati, Comet, Crane Valve, Curtis & Marble, Danti Paolo, Diriler, Fontanet, GEMATEX, Gessner, Guido Regis, Haining FangJi Machinery Works, Hämmerle, Hergert/Holthausen, Huang, Ikuang Machine Works, Iwakura, James Bailey, Jinan Sinotech, Kettling & Braun, Lafer, Lamperti, Lian Yun Gang, Lidem, M-tec, Mario Crosta, Menschner, Mortamet, MTW, JiangSu, Parks & Woolson, PengLeng, Peyman Machine Isfahan, Raxhon, Sai Sukritii International, Sara Tex, Sellers, Shanghai Good Grinding, Shaterian, Sistig, Sucker/Müller, Surber, Tacome, TianJin HuaDi LianXin, TMT, Torres Maquinaria Textil, Vollenweider, WuXi Xin Yi, Xetma, ...



CAULKED SPIRAL

particularly high stability and shearing performance, therefore ideal for heavy shearing products, e.g. carpet, consistent cutting angle of 10°

MATERIAL THICKNESS	2,1 MM for light to medium-heavy products	2,5 MM for heavy products
FILE CUT	no file cut, 13, 15, 18	9, 11, 13
LENGTH	any length within this range is possible: 50 up to 8000 mm	

Machine manufacturer

Anhui Laifu, Anmak, Bitexma, BROMA, Capdevilla, Caru, Changzhou KunLiang, Changzhou Machinery Works, Changzhou ShengWang, Changzhou TongYue Machinery, Chien Lun, Cogliati, Comet, Crane Valve, Curtis & Marble, Danti Paolo, Diriler, Fontanet, GEMATEX, Gessner, Guido Regis, Haining FangJi Machinery Works, Hämmerle, Hergert/Holthausen, Huang, Ikuang Machine Works, Iwakura, James Bailey, Jinan Sinotech, Kettling & Braun, Lafer, Lamperti, Lian Yun Gang, Lidem, M-tec, Mario Crosta, Menschner, Mortamet, MTW, JiangSu, Parks & Woolson, PengLeng, Peyman Machine Isfahan, Raxhon, Sai Sukritii International, Sara Tex, Sellers, Shanghai Good Grinding, Shaterian, Sistig, Sucker/Müller, Surber, Tacome, TianJin HuaDi LianXin, TMT, Torres Maquinaria Textil, Vollenweider, WuXi Xin Yi, Xetma, ...

FIXING THE SPIRAL



SPIRAL WITH STRETCH-SCREW

Consistently optimal cutting angle: 25°

APPLICATION: for light textiles such as cotton, silk, ...



SPIRAL WITH STRETCH-SCREW AND BOLTS

Consistently optimal cutting angle: 25°

APPLICATION: for medium-heavy to heavy materials such as carpets



SPIRALS WITHOUT STRETCH-SCREW

Consistently optimal cutting angle: 25°

APPLICATION: for heavy products, tight fibres: carpets, micro-fibre material



CAULKED SPIRAL

Constant cutting angle: 10°

APPLICATION: for heavy products, tight fibres: carpets, brushes, shredder-material, special applications

NUMBER OF FILE CUTS

THICKNESS OF SPIRAL

PRODUCTS TO BE SHEARED	NUMBER OF FILE CUTS PER CM	BLADE THICKNESS EX WORKS IN MM
Combed yarn / carded yarn	18	1,5
Embroideries	without file cut /15, 18	1,5 / 2,0
Flat woven fabric (cotton)	13 / without file cut	1,5
Plush	15	1,5
Velour	13	1,5
Circular knitting plush / fleece	13	1,5
Blankets	13	1,5
Carpets	9 / 11	2*
Fleece	13 / 18	2 / 1,5
Sisal, coconut fibre	9 / 13	2

*only valid for concave spirals

LEDGER BLADE

WHICH LEDGER BLADE TO USE?

Ledger blades influence the shearing result. It is therefore important to select the right blade.
For the perfect fit of the ledger blade according to your requirements please select from the following 3 basic properties:

LEDGER BLADE MATERIAL

THICKNESS OF THE LEDGER BLADE

COMPOSITION OF THE LEDGER BLADE

LEDGER BLADE MATERIAL

TYPE OF FABRIC	HL	H4	POLYMANT
Cotton	x	x	x
Wool	x	x	x
Polyester		x	x
Technical textiles			x
Material properties	high-alloyed tool steel 57-59 HrC	optimised high-alloyed tool steel 59-61 HrC	metallurgical steel 61-64 HrC

THICKNESS OF THE LEDGER BLADE

TEXTILES TO BE PROCESSED	THICKNESS* OF LEDGER BLADE IN MM
Combed yarn/carded yarn	3
Embroideries	3 - 4
Flat woven fabric	3 - 4
Plush	4
Velour	4
Circular knitting plush / fleece	4
Blankets	4
Carpet	5 - 6
Fleece	4 - 5
Sisal, coconut fibre	4
Synthetic fibres	4 - 5

* recommended by Heusch. Deviating data adjusted by machine manufacturer replace the standard value.

COMPOSITION OF THE LEDGER BLADE

OVERALL LENGTH	50 - 6500 mm
HOLES	round, oval etc. as per customer requirements
WIDTH	50 - 500 mm



CYLINDER

We manufacture cylinders according to your wishes.
Solid body and as hollow body.
Diameter from 40 to 300 mm.
Lengths from 50 mm to 8000mm.

In order to guarantee the necessary stability, an optimal ratio between length and diameter is important.
We take pleasure in assisting you with your calculations.



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