

# KULLEN-KOTI BRUSHES

## BRUSHING SOLUTIONS FOR THE TEXTILE INDUSTRY

Carding, combing, flocking...



 **Kullen**  
— KOTI GROUP —  
Brushing Solutions





# BRUSHING SOLUTIONS IN PRACTICE

**Our broad range of brushes offers a lot of possibilities within the textile industry. Industrial brushes are used for the manufacture of printing and finishing of textile products, in functions occurring along the complete production line.**

Kullen-Koti is a manufacturer of technical brushes and an original equipment manufacturer for textile machinery. The brushes are used, for instance, in needle felting machines, knitting machines, flocking machines, crimping machines and many more.

The brushes of Kullen-Koti are available with different fill materials, such as synthetic bristles fibres and wires in all commonly used qualities, abrasive filaments, natural bristles and plant fibres.

With creativity and experience as well as our technical know-how we have been manufacturing technical brushes for decades. Over the years we have produced more than 1 million different types, with new models being added every day. No matter what your requirements are or in which sector you are active, we can offer the best brushing solution.



## Small but essential

### Applications

Through our years of experience we have developed and manufactured many different types of brushes for the textile industry. Since each desired result is different, we pay particular attention to the specific needs and working conditions. The Kullen-Koti brushes are suitable for:

- Carding
  - Cleaning
  - Combing
  - Dust removal
  - Flocking
  - Roughing
  - Structuring
- ...and much more!

### Types of textiles

The Kullen-Koti brushes are suitable for processing various types of textiles, for example:

- Raw cotton
- Needle felt
- Velour
- Soft fabrics

For more information or to arrange a visit from one of our technical advisors, please contact our sales department.

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### Flocking brushes

Roller brushes are used for applying the flock material.



### Knitting machine brushes

Special-purposes brushes used in flat knitting machines for opening and closing the needle latches.



# BRUSH APPLICATIONS



## Brushes for carding and comber machines

Carding machines make raw material, like cotton, usable for creating yarn and threads.

- **Carding brushes** also known as Kullen-Koti spiral roller brushes are used in carding systems for flattening (carding) the raw fibres.



After the carding process, the raw materials go through a comber machine.

- Kullen-Koti **combing cylinder brushes** remove fibres stuck in the cylinder comb.
- These brushes are also appropriate for brushing/combining textile following shearing.

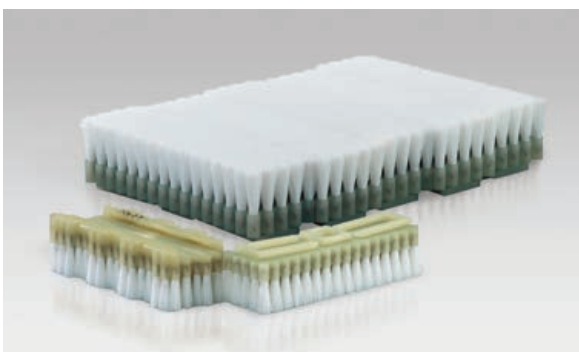
Due to our brushes in these machines, the yarn and threads become finer and stronger.



## Brushes for spinning, winding and weaving machines

When yarn and threads are being weaved to a fabric, the yarn may become a bit ruffled. In order to achieve smooth fabrics Kullen-Koti brushes are used.

- Kullen-Koti **ST system / Quick Snap brushes**: for the removal of ruffles and dust during the weaving and winding process. The yarn are used to define the trimming material for the brush.



## Brushes for industrial knitting, sowing machines and needle looms

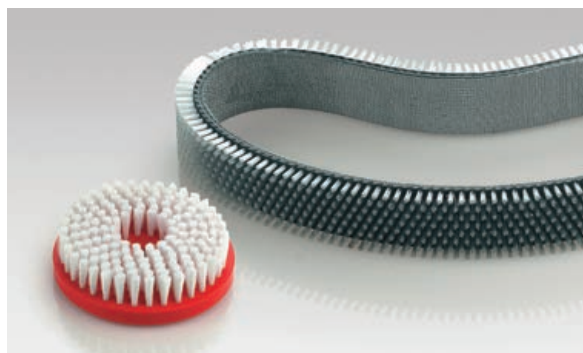
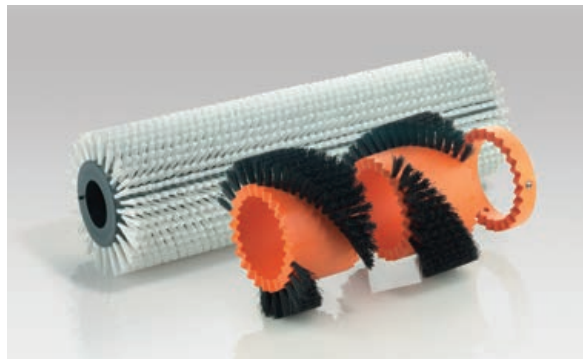
- **Knitting and sowing machine brushes** also known as latch opening brushes are especially designed for opening and closing the needle latches.
- **Special brush segments for needle looms**: in order to produce high-quality velour or needle felt, special brush segments are used as a peripheral homogenous brush belt during the needling process. For more information about our special brush segments for needle looms see pages 6 and 7.



## Brushes for cleaning in the textile industry

With processing and manufacturing textiles, rest material of threads and dust are left on and in the machinery. Kullen-Koti brushes remove effortlessly and efficiently all the dirtiness from blow rooms and textile winding machines making sure that the equipment stays clean and intact.

- **Roller brushes** are used for cleaning the textile surface following shearing and for cleaning of printing blankets and cylinders after the fabrics have been dyed, coloured or printed.
- **ST-System / Quick Snap brushes** remove dust and lint of calendar rolls. Depending on the exact application, different fill types are possible.
- **Disc brushes** are used, for instance, to clean drive chains of textile lint.
- **Flat and toothed belt brushes** are the ideal solution for cleaning shorn surfaces.



## Brushes for roughing, structuring and finishing textiles

Textiles and fabrics are processed further for improving the feel, look and quality of the material.

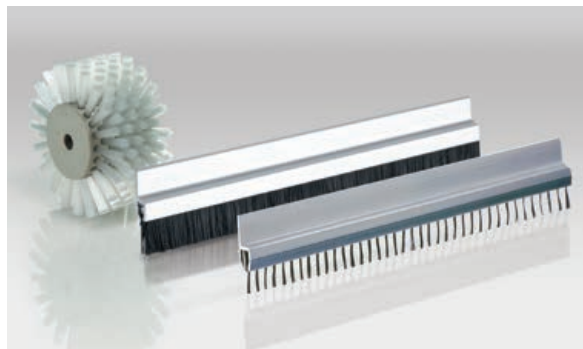
- **Roughing roller brushes** structure fabric surfaces (such as Alcantara) are produced in different qualities. The type of fabric determines the filling material of the brush.
- **Abrasive spiral- and tufted roller brushes** are used for sueding or finishing fabrics, like “washed jeans”. The grit size of abrasive bristles determines the end result.



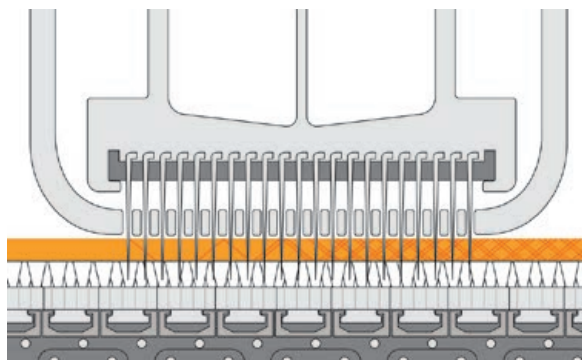
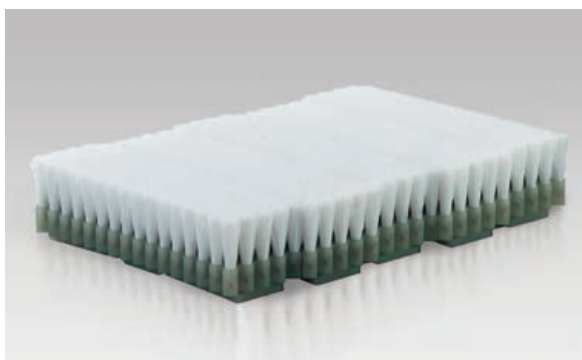
## Other brushes in the textile industry

In order to make sure that materials can be processed well or that machines can function fine, Kullen-Koti also offers “supporting brushes”.

- **Circular brushes** are used in tensioning frames with different filler materials. They prevent the slippage of textiles during transport.
- **Strip and sealing brushes** seal openings of machine against fibres and dust. These brushes also have a sealing and guidance function on conveyor belts.
- **Antistatic brushes** dissipate electrostatic charges generated for instance by synthetic fibres.



## BRUSH SEGMENTS FOR NEEDLE LOOMS



Several years ago, Kullen-Koti has started to produce brush segments for needle looms. Today we are supplying our brush segments all over the world. With special built tools we can guarantee the high quality standard of our brushes.

A perfect fit in the rail and the achievement of a seamless brush surface is what you get from Kullen-Koti segments, due to a special injection moulding process and a special mixture of Polyamide fill material.

### Available types of brush segments:

For non-woven up to 450 gr/m <sup>2</sup>			For non-woven up 450 gr/m <sup>2</sup> and more		
Art.no.	4631.0003	4631.0026	4631.0019	4631.0021	4633.0034
Length	124/132 mm	124/132 mm	124/132 mm	124/132 mm	127/428 mm
Core width	40.8 mm -0.3	40.8 mm -0.3	40.8 mm -0.3	40.8 mm -0.3	49.02 mm
Core thickness	16 mm	16 mm	16 mm	16 mm	17.5 mm
Trim height	20 mm*	20 mm*	20 mm*	20 mm*	20 mm*
Nr. of rows	9	9	9	9	10
Fill material	Ø 0.20 PA 6.12 white crimped	Ø 0.20 PA 6.12 white crimped	Ø 0.25 PA 6.12 white crimped	Ø 0.25 PA 6.12 white crimped	Ø 0.20 PA 6.12 white crimped
Extra	-	with key	-	with key	-

\*Brush segments with trim height 25 mm are available upon request.

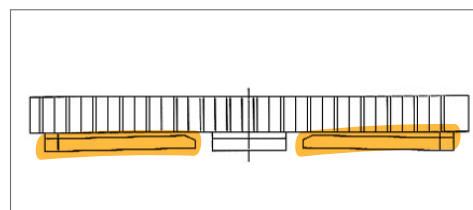
Physical quality of PA6.12 fill material:	
Heat resistance in dry operation (°C)	110
Heat resistance in wet operation (°C)	100
Low temperature stability (°C)	-40



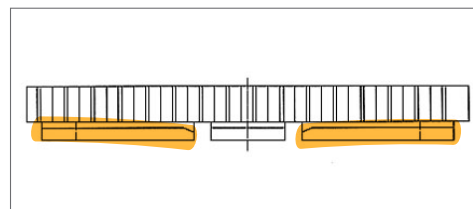
Chemical resistance (at 20°C):		
Acetone		Hydrochloric acid 30%
Ammonia (liquid)		Hydrogen peroxide 30%
Benzene		Hydrogen peroxide 5%
Benzine		Kerosene
Bleaching lye		Lube oil
Calcium chloride 10%		Methanol
Carbon tetrachloride		Mineral oil
Caustic potash		Nitric acid 10%
Caustic soda 50%		Nitric acid 50%
Chromic acid 70%		Phenol
Dichlormethane		Phosphoric acid 20%
Diesel oil		Phosphoric acid 80%
Engine oil		Potassium permanganate
Ethanoic acid 70%		Sulphuric acid 10%
Formic acid 10%		Sulphuric acid 50%
Formic acid 90%		Sulphuric acid 96%
Heptane		Trilen
Hexane		Tuluol
Hydrochloric acid 10%		Xylem

#### Legend

	Permanent stable
	Conditionally stable
	Unstable



Brush core with key:



Brush core without key:





# Unlimited possibilities



Our brushes make products ready for use. Brushing solutions from Kullen-Koti provide added value for products and materials in various ways. Many years of experience and know-how make it possible to support numerous applications in textile processing such as:

- Flocking
- Combing
- Needle opening and closing
- Roughening
- Carding
- Sealing
- Dissipation
- Cleaning
- Guidance

...and many more!

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