

## Fibrillating of Tapes and Films

### NEW Product: «Shark» Fibrillating bars

For fibrillation of elastic and multi-oriented materials, as well as recycled films – which can hardly be fibrillated under normal conditions- we have developed special flat pin fibrillating bars called «Shark». These bars can be used with the Burckhardt system on a grooved roller. The new bars have different pins which allow fibrillation of materials which have previously not been able to be fibrillated such as PE or elastic PP. All existing Burckhardt fibrillating rollers can be equipped with Shark bars.

This innovation is protected by international patents.

### Take advantage of our Know-How – we are glad to help you!

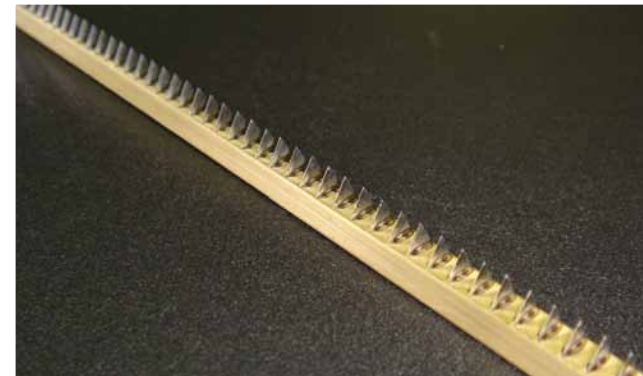
For further information about technical possibilities, please refer to our measure sheets. If they are not included in this leaflet, download them at: [www.burckhardt.com](http://www.burckhardt.com)

Please send us your detailed inquiry together with a sample of material or call us. We would be glad to help you identifying your required equipment.



#### BURCKHARDT OF SWITZERLAND AG

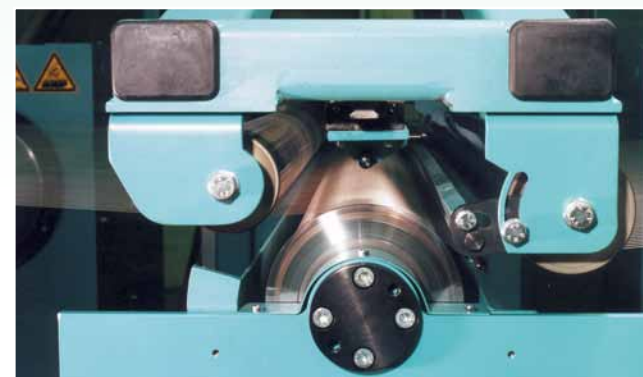
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*Finally elastic materials can be easily fibrillated with «Shark»-bars*



*Our original machinery equipment is available for a working width of up to 2 meters*



*Leading tape-line manufacturers are relying on the Burckhardt fibrillating system*

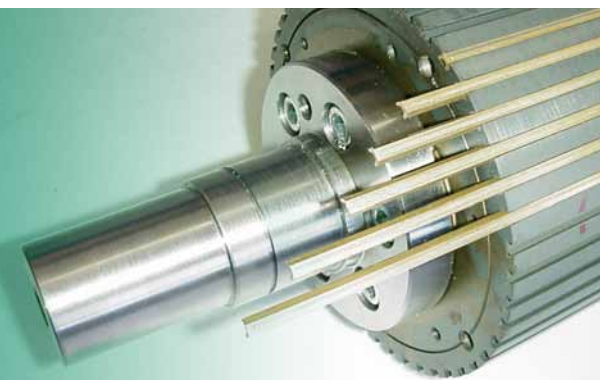


## Fibrillating of Tapes and Films





*Fibrillation transforms flat films into dimensional structures (e.g. yarn)*



*Our System provides easy exchangeability of the bars without dismantling the roller*



*We supply all kinds of fibrillating systems which are based on pins*

We are the leading provider of fibrillating equipment - our innovative and tailor-made solutions increase customer's advantage in a competitive industry.

## Tailor-Made for the Fibrillating Industry

**A high quality level and long life-time is essential for fibrillating tools. Pins are ideal for cutting oriented polymer tapes. Thanks to constant innovation and improvement the efficiency and reliability of tools has increased. This has made us suppliers to all leading machinery makers and their direct customers, both using our products for their individual applications.**

### Original Equipment and Retrofit

Most leading machine manufacturers are using Burckhardt fibrillating rollers with exchangeable needle bars for the fibrillating unit of their tape line. The compact construction of the roller allows a retrofit into an existing system as well. Optimal flexibility of the fibrillating roller is granted and needle bars can be exchanged directly on the production unit without dismantling the roller.

### Development and Consulting

New applications and materials are increasing the demand for fibrillating equipment. Together with our customer we analyze the parameters of a new application in order to match their requirements and to achieve the material quality to be processed. Consequently the productivity, tape quality and life-time of the needle bars are increased.

In addition to process optimization, we can offer engineering to add Fibrillation capability to existing tape lines.

### Fibrillated films and tapes have many advantages

- Simple processing
- Cost-efficient production
- Higher flexibility
- Higher elasticity
- Very good tear strength
- Better abrasion resistance

## Fibrillating of Tapes and Films

## Applications

**Fibrillated tapes are used in many products and applications:**

- Carpet backing
- Artificial Grass, Synthetic Turf
- Ropes, Cords, Sewing Yarn
- Harvest Yarns
- Packaging Cords
- Concrete Fibers
- Carrying Ropes
- Tapes for woven Big Bags (FIBC)
- Staple Fibers (PTFE)

### Technical Possibilities

**Burckhardt fibrillating rollers** offer various alternatives to meet customer's needs

- Fibrillating roller of steel for higher needle bar density
- Hard chromium plated Fibrillating roller for longer life-time

**Fibrillating bars** (spares for rollers) offer various possibilities:

- Maximum pin density up to 75 pins/cm (190 pins/inch)
- Staggered arrangement of the bars improves tear resistance of fibrillated tapes
- Pin projection ranges from approx. 0.5 - 6mm (standard 1 - 2 mm)
- The pins can be arranged in several rows. To increase lifetime, stronger pins can be used
- To minimize down-time, the needle bars can be exchanged without dismantling the fibrillating roller
- Different pin inclination can be chosen, to adapt to the material characteristics
- Fibrillating bars made of coated steel for longer life-time

### Additional Fibrillating products

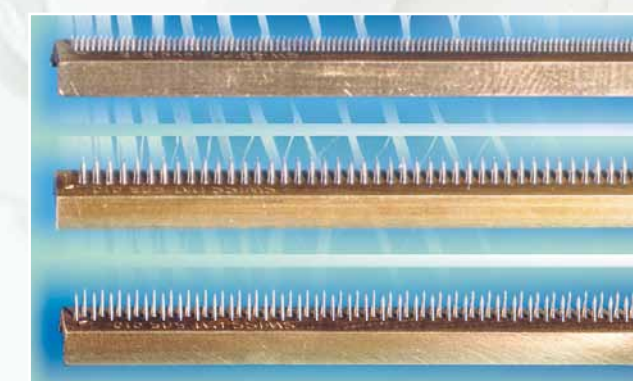
- Conventional fibrillating rollers (needle cylinders)
- Separating combs for tape lines
- Technical ceramic blades for cutting of tapes
- Various needle bars and needle rings for other systems



*Sewing yarn for FIBC's as well as ropes are typically made from fibrillated tapes*



*Artificial grass, carpet backing and ropes are based on fibrillated films or tapes*



*A wide range of fibrillation at high quality is possible with our fibrillating bars system*