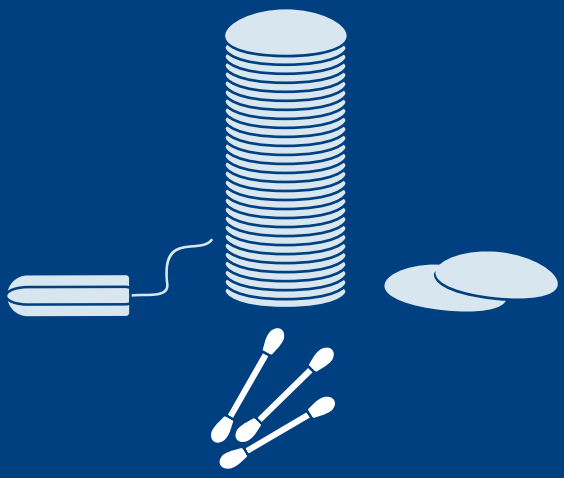
THE TRUE WAY TO YOUR **HYGIENE PRODUCTS**



C|D|**E**|S|P|R|T

TRÜTZSCHLER
SPINNING

Head start for hygiene products

The growing world population and rise in prosperity have an influence on the demand for hygiene articles. Not only are more and more such products needed, but the demand on their quality and production is also constantly increasing.

Thus, in addition to the machines in the nonwovens area, Truetzschler also offers machines for the efficient production of high-quality hygiene products made from staple fibers, such as tampons, cosmetic pads, cotton swabs, cotton balls and zig-zag cotton.

YOUR FIRST-CLASS HYGIENE PRODUCTS

Reliable separation of foreign parts with the T-SCAN detection models at any time.

INOX

Stainless steel equipment in the blowroom and the cards for safe processing of man-made fibers.

Everything in view with the remote display T-LED. It provides information on the machine status intuitively at the speed of light.

Multidimensional savings potentials thanks to best quality at highest production rates only with Truetzschler cards.

Truetzschler cards stand for:
optimal cylinder width, perfect web doffing, highest quality.

Perfection for hygiene products

For the production of hygiene products, particularly high demands are placed on the raw materials applied. Usually, viscose fibers or bleached cotton are used. In all cases, these fibers must be opened gently and formed into a very uniform, homogeneous sliver or web.

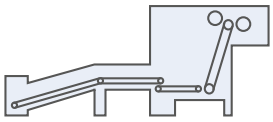
Cotton swabs

Efficient production of cotton swabs and other cotton products

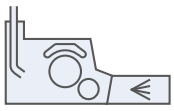
Efficient production when fine slivers are subject to particularly great challenges:
The Truetzschler card with Neuenhauser Rosink web splitting allows the highest sliver quality by means of four integrated control circuits. The quad sliver coiling and the high delivery speed result in a very efficient system, even when processing 100 % noils.

100 %

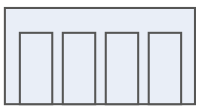
Processing of noils



Truetzschler opening



Truetzschler card with Neuenhauser Rosink web-splitting unit



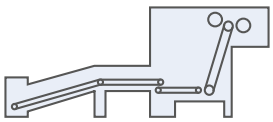
Neuenhauser Rosink Quad Coiler

Tampons

High-precision production of tampons

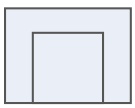
Especially in the production of tampons, a very high uniformity of the produced strip is important. This accuracy can only be achieved with Truetzschler cards. The Neuenhauser Rosink calender and strip laying unit provides perfect laying of the calendered web strip.

Truetzschler cards stand for: optimal cylinder width, perfect web doffing, highest quality.



Truetzschler opening

Truetzschler card with strip forming and calender unit



Sliver coiling system for rectangular cans

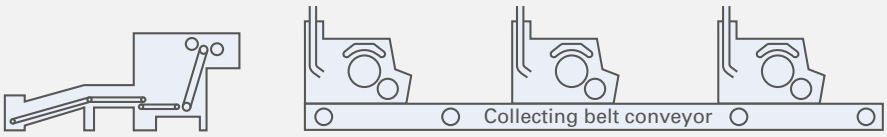
+ EFFICIENCY
QUALITY

Cotton pads / multi-layer webs

Everything from a single source

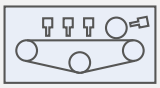
Everything from a single source: Truetzschler Spinning and Truetzschler Nonwovens offer flexible complete solutions for your cotton pad production. This installation is also ideally suited for the production of multi-layer webs for other applications such as zig-zag cotton.

Everything from a single source



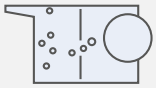
Truetzschler opener | Truetzschler card | Truetzschler card | Truetzschler card

TRÜTZSCHLER SPINNING



MiniJet

Drying



Winder + cutting equipment

TRÜTZSCHLER NONWOVENS

Application know-how from a single source

For hygiene products, the right raw materials, the right production installation and technological know-how must come together.

From the wide range of fiber preparation machines, application-specific machines from blowroom and card are used. In cooperation with Neuenhauser Rosink, this results in integrated production installations that are individually adapted to your requirements.

SPE
CIA
LIST

The right preparation is decisive for quality

In addition to ideal tuft preparation in the blowroom, the card is the key machine for all hygiene products. This is where product quality is decided. The Truetzschler machines are precisely tailored to your raw material:

- Modular blowroom concept
- Flexible foreign part separation
- WEBFEED on the card with three licker-ins
- Multiwebclean with individual carding segments
- Individual clothing selection

Hand in hand with reliable partners

The different hygiene products require very different units downstream from the card. Here we either use our own developments or work hand in hand with partners to ensure perfectly coordinated interfaces.
Possible units are:

- Web splitting unit
- Strip forming and calender unit
- Collecting belt conveyor
- Or shoving unit with collecting belt conveyor

GENERALIST

As a generalist in staple fiber preparation, Truetzschler offers you complete solutions, hand in hand with reliable partners! This means integrated units for your applications and at the same time specialised solutions for your raw material.

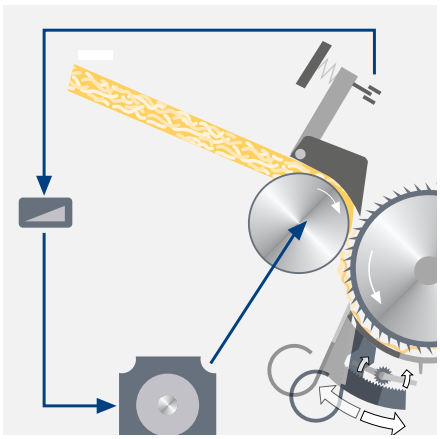
It all depends on preparation!

Especially the relatively short preparation lines for hygiene products require tailor-made, efficient machine solutions. With its modular concept, Truetzschler offers its customers the flexibility to effectively support different production quantities and processes.

Reliable separation of foreign parts with the T-SCAN detection models at any time.

T-SCAN for hygiene items free of foreign parts

Complete absence of foreign parts is particularly important for hygiene items. The Truetzschler Foreign Part Separator T-SCAN TS-T5 is therefore recommended for fiber preparation.

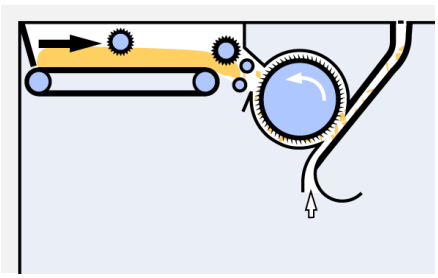


CONTIFEED 2 for perfect material flows

CONTIFEED 2 ensures perfect material flow in the blowroom and especially in the connected carding area. Thanks to the continuous material flow instead of stop and go, the full potential of the machines can be exploited. Uniform feeding has a direct influence on the quality of the end product especially during the production of finest slivers on the card.

BO-E – performance and economic efficiency

The Hopper Feeder Bale Opener BO-E is characterised by flexible use and high economic efficiency during the opening of staple fibers. The manual bale feeding can easily be combined with the downstream openers – such as the TO-T1.



The ideal preparation for the card: TO-T1

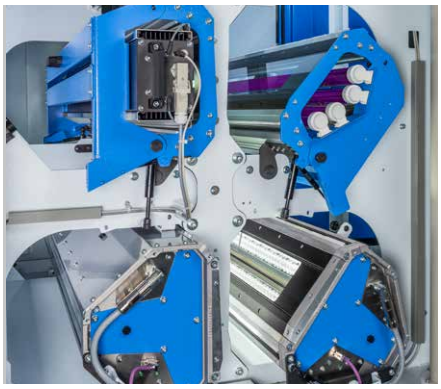
The Fine Opener TO-T1 prepares the fed fiber tufts ideally for the downstream carding process. The opening of the tufts is particularly gentle and gradual due to the fine needles of the opening roll.

The perfect blend with MX-U6

Here 6 chambers are filled one after the other from the top and emptied simultaneously from the bottom. This principle guarantees maximum homogeneity of the blend.
Efficient operation thanks to closed air circuit, which simultaneously uses the transport air to transport the tufts.

T-SCAN – reliable foreign parts detection

Nowhere is it as important as with hygiene products: Absence of foreign parts, because there is no tolerance for foreign parts in hygiene articles. On the other hand, processed waste and noils – which are not free of foreign parts – are often used as raw materials. Therefore, the use of Truetzschler foreign part separation technology is preferable in such systems.



Detection modules

Truetzschler uses five modules for the detection of foreign parts. Each one is specialised to reliably detect the characteristic of various foreign parts in the fast fiber flow. In this way even the smallest foreign parts can be detected and separated.

Separation example for viscose and bleached cotton

Module	Type of foreign part detection
• F-module	Coloured / dark foreign parts
• P-module	Transparent foreign parts
• UV-module	Fluorescent foreign parts
• G-module	Shiny foreign parts
• LED lighting	Small / thin foreign parts

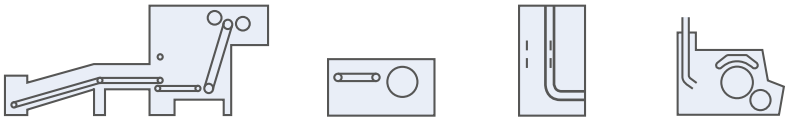
Stainless steel equipment

All material-carrying parts for man-made fibers and bleached cotton are made of high-quality stainless steel. This equipment prevents the accumulation of finishing agents and thus leads to a clearly safe fiber transport. This also prevents the adhesion of fibers due to static charge.

INOX

Installation example for a blowroom

The T-SCAN is used in the blowroom downstream from the Fine Opener TO-T1 and upstream from the card. This is where the foreign part separation is most efficient.



The key point for quality: Truetzschler cards

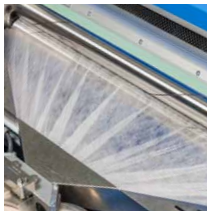
The number 1 in hygiene applications, because Truetzschler cards can do more than just card sliver. They also provide technology for products outside the field of spinning. Special developments and the combination with machines from Truetzschler Nonwovens or our cooperation partner Neuenhauser Rosink result in application-specific solutions.

Special surface finish for gentle opening

Stainless steel versions of the fiber-carrying parts in the feed area and the WEBFEED with three optimally synchronised opening rolls are essential for processing of man-made fibers. A special surface finish and the durable needles ensure a gentle opening. Compared to metallic clothings, the service life of needles is about twenty times longer.

INOX

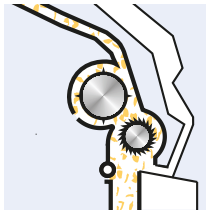
Optimized version of the card for man-made fibers with stainless steel equipment and three licker-ins.



Finest webs at high production rates

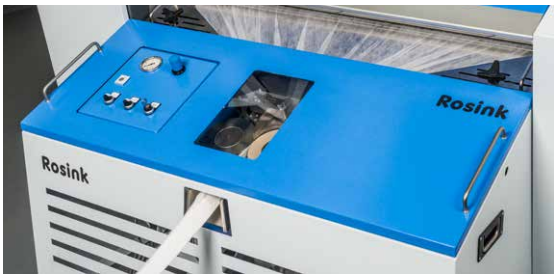
The optimum width of the cards also leads to a particularly good performance of the card in hygienic applications. Thanks to our optimum cylinder width, we can also run significantly smaller web weights with the same doffer assignment as the competition. Due to the perfect web doffing, high delivery speeds are still possible. To ensure the right production!

Truetzschler cards stand for: optimal cylinder width, perfect web doffing, highest quality.



High uniformity thanks to perfect card feeding

The uniformity of the products and thus the uniformity of the card delivery is important for all hygiene products. Therefore, we combine several levelling systems in the tuft feeder and feeding area of the cards with each other.



Compactness thanks to integrated systems

The Truetzschler card and the Neuenhauser Rosink laying system work together in perfect harmony because they are directly integrated into the card. The integration enables flexible adjustment of the pressing and web widths, perfectly matched to your products.

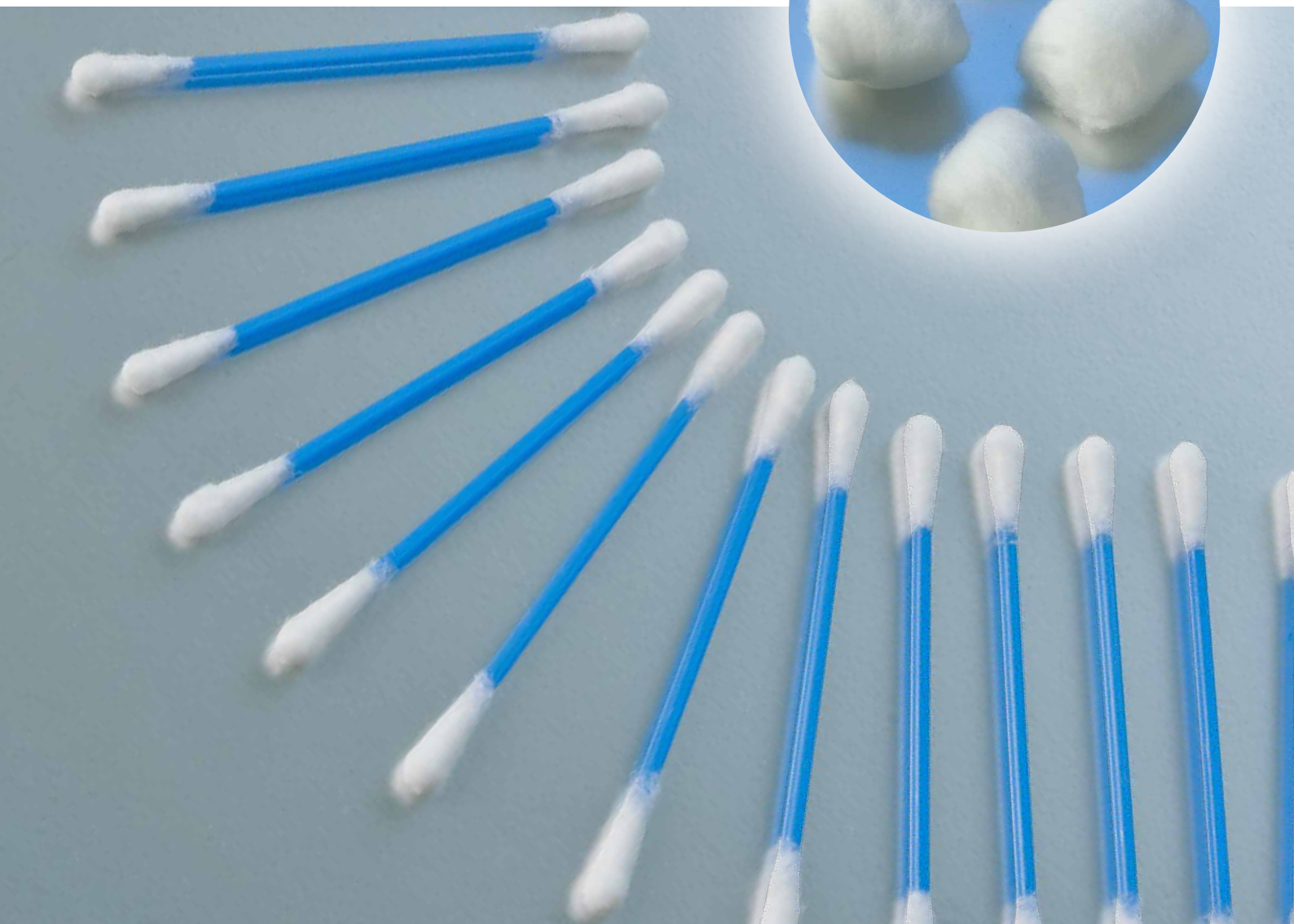
Perfectly adaptable clothings

All card clothings are perfectly adapted to the raw material of your hygiene products and have very long running times. Different configurations of the WEBCLEAN system with a different number of carding segments in graduated fineness improve the carding quality.

Savings potential through Truetzschler cards.

Cotton swabs and cotton products

Bleached noils with a fiber length of approx. 13 to 17 mm are preferred for the cotton swab sliver. They can be produced easily thanks to the stainless steel equipment in the cards.



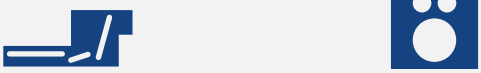
The right blowroom line for your production

Thanks to the stainless steel equipment in the cards, bleached noils or viscose fibers can also be produced without any problems. Depending on the desired production, the opening line can be configured accordingly.

100 %

Processing of noils

Smaller production



BO-E TO-T1

Larger production

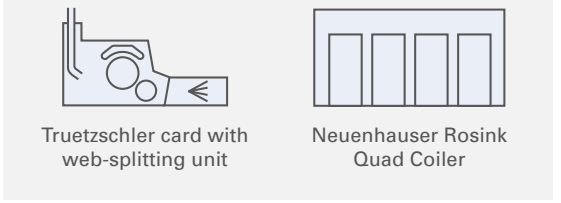
BO-E MX-U6 TO-T1

Truetzschler card with Quad Coiler

A particular challenge when making cotton products is the production of particularly fine and uniform slivers. These have a weight of only 1.3 - 1.7 g/m for cotton swabs and a weight of only 3.0 - 3.5 g/m for cotton balls.

Thanks to a variety of aspects, this is no problem for Truetzschler cards and sliver breaks do not stand a chance:

- Four internal control circuits
- Self-adjusting feeding thanks to CONTIFEED
- Perfect web doffing due to the cylinder doffer
- Compact web forming unit



Truetzschler card with web-splitting unit

Neuenhauser Rosink Quad Coiler

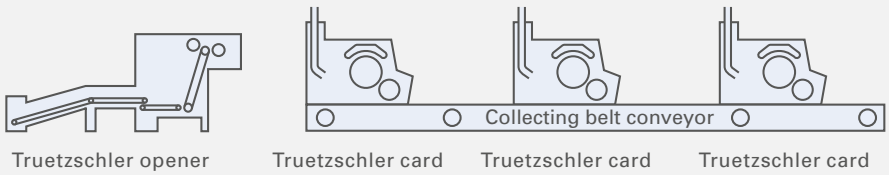
For cotton swabs and cotton balls, the card web is divided into up to 4 slivers via the Neuenhauser Rosink web-splitting unit. The direct integration into the card results in higher efficiency.

Following this, the automatic Neuenhauser Rosink can changer "Quad Coiler" neatly coils the slivers into four cans at the same time.

Cotton pads – step by step

Everything from a single source! Truetzschler is the fully reliable partner when it comes to the production of cotton pads: The modular system from Truetzschler Spinning and Truetzschler Nonwovens allows free planning and highly flexible adjustment to product and material. This provides an economical solution even for smaller productions.

Web production



Blowroom machines for web production

The raw materials used for cotton pads are mainly bleached cotton waste and noils. The Truetzschler blowroom also convinces by its low maintenance work and its optimal use of raw materials.

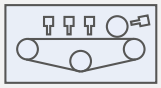
Truetzschler cards connected in series

After opening and cleaning, the raw material is fed to cards that are connected in series. The carding of the material ensures a reduction in neps and optimum opening of the tufts down to the individual fibers. The resulting web has a very uniform and homogeneous surface as well as a constant weight.

The cards deliver a web that is brought together on a collecting belt conveyor. Different web thicknesses are possible due to different productions on the card. Recycled punch waste can be fed back into the centre layer so that the quality of the outer layers is not impaired.

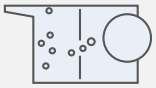
The system can also be supplemented by a highly efficient foreign part detection by T-SCAN.

Web processing



MiniJet
TWB-MJ

Dryer
TWD-MD



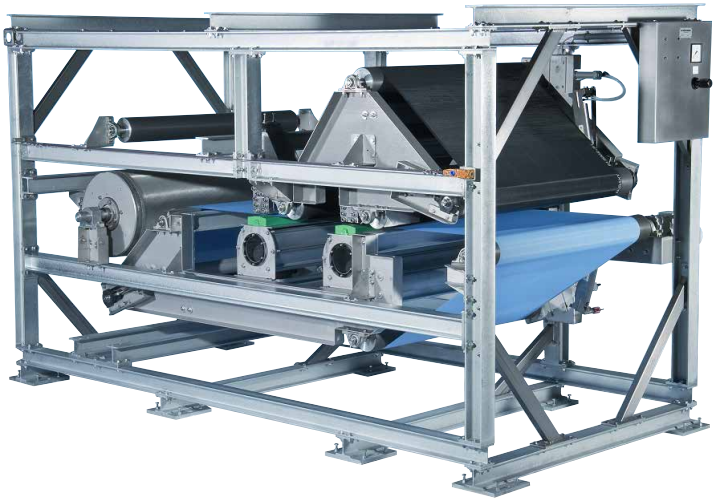
Winder + cutting equipment
TWD-SD

TRÜTZSCHLER NONWOVENS

Web bonding

The multi-layer web is fed directly into Truetzschler Nonwovens spunlacing, the MiniJet. In line with the product, compaction and suction as well as the number and position of water beams can be freely planned.

The MiniJet enables efficient web bonding and offers additional options for structuring. In practice, the component convinces with its maintenance and user friendliness as well as its excellent availability.



Drying: Flexible at high speeds

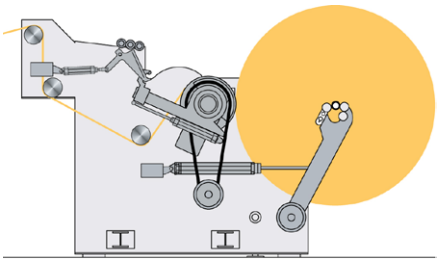
After spunlacing, the web is dried to the desired residual moisture. Due to its high specific drying performance, it dries a wide variety of web types in a short time and offers a high drying uniformity.

End of cotton pad production line

Winding ready-for-sale rolls in one step

After drying, the webs are cut to the required width and wound up.

These web rolls are then fed directly to the pad punch. Punch scraps are re-opened and returned to the process.



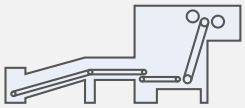
The master roll winder TWW-SD

High-precision production of tampons

Due to the strict limits on the absorption of tampons that must be complied with, the production of tampons is subject to narrow quality limits. Thus, to achieve the accurate target weight of tampons is of greatest importance. With Truetzschler cards it is possible to achieve these high requirements at simultaneously high production rates.

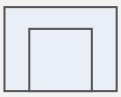
The perfect tuft opening for absorbent products

Viscose is mainly used for the production of tampons. If several viscose types are applied, a T-BLEND system can be used, because a homogeneous material blend is essential for a good and consistent product quality.



Truetzschler opening

Truetzschler card with strip forming and calender unit



Sliver coiling system for rectangular cans

Highest accuracy at high production rates

There are narrow quality limits for the production of tampons since, on the one hand, the processed material has narrow margins for economic reasons. On the other hand, there are strict limit values to ensure that the absorption effect of tampons is maintained.

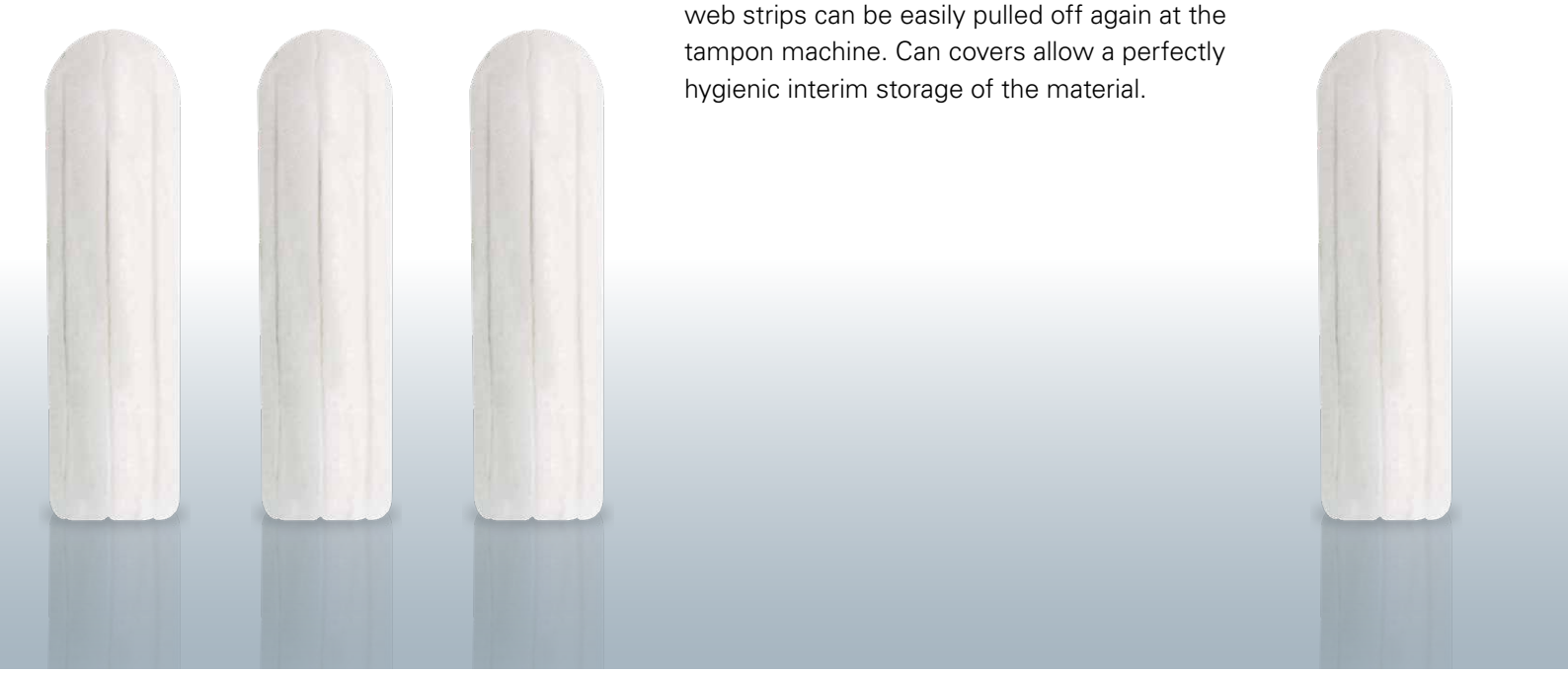
Truetzschler cards stand for: optimal cylinder width, perfect web doffing, highest quality.

Perfectly coordinated systems

Only Truetzschler and Neuenhauser Rosink offer excellently synchronised solutions. The strip forming and calender unit is integrated into the card. The systems work perfectly together.
At the output of the card, the web is thus combined to form a web strip with a rectangular cross-section and pressed via an integrated calender system.

Efficient coiling system

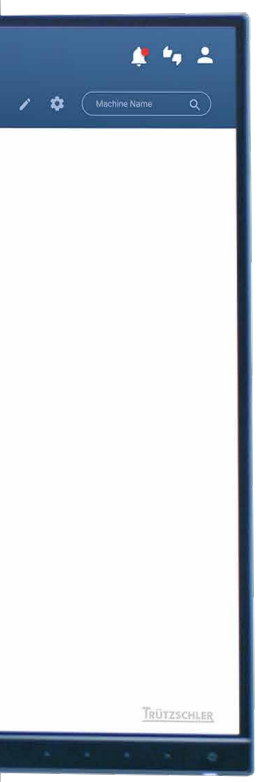
A specially developed coiling system ensures perfect coiling geometry when depositing the web strips into large rectangular cans. These web strips can be easily pulled off again at the tampon machine. Can covers allow a perfectly hygienic interim storage of the material.



Machine Name
FINISHER DRAWING
AIRJET SPINNING
MY MILL
Machine Overview
PRODUCTION MILL 1
All Lines
All Specifications
BLOW ROOM
CARDING WITH IDF
Group name
TC 15-08

Digital Solutions: Always and everywhere informed

With Truetzschler technology, you can further extend your lead – also in the course of digitisation. Our digital solutions enable you to generate profits faster, bundle resources, optimize processes and save costs with little effort. They are as easy to use as an app and work even if you do not use only Truetzschler technology.



My Mill

The all-in-one platform: Whether information about your production, quality, maintenance or simply a complete overview - with My Mill your possibilities are almost limitless.

My Production

Knowing what is going on at home: The extension to My Mill is the ideal companion for managers on the go. You are fully informed practically anywhere on earth and can intervene as necessary.

My Wires

Your digital clothings management: Digitise your clothings and their condition in just a few minutes! Receive automatic notification of pending repeat orders and maintenance.

Our digital offers are cloud-based and extremely secure. We rely solely on the highest security standards because data security is just as important to us as it is to you.

The true way to your yarn quality

On the way to yarn quality and economic efficiency, spinning mills are facing increasing challenges: shortage of specialists, high flexibility in production, optimal application of resources, etc.

Since the foundation of our company we have been using our values to offer you what is of importance: "The true way to your yarn quality." We are continuously developing new technological solutions that allow you to address the rapid market changes, thus ensuring the success of your business. To support you in pursuing "The true way to your yarn quality", we are providing practical innovations and self-optimizing functions here and now as well.

The creation of true yarn quality involves the entire process:

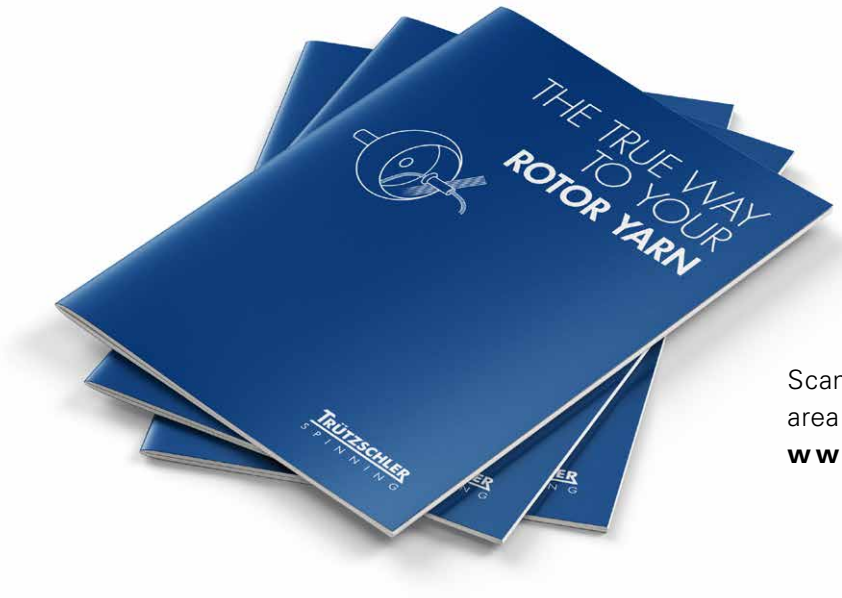
- Perfect web doffing and maximum uniformity for highest quality
- T-SCAN – combination of five technologies for yarn free of foreign fibers
- CONTIFEED 2 – improved degree of cleaning due to continuous production

Key positions where resources are conserved:

- Blow room – Energy Saving Mode – reduces fan speed to an energy-saving minimum
- Flow-optimized suction ducts for minimum air volumes
- Use of energy-efficient motors on the card
- Raw material recovery by returning the punch waste

Innovative, self-optimizing technology:

- Always on the safe side with T-CON and contact disconnection on the card
- T-SCAN – the light output of the LED module is permanently optimized for a consistent separation rate



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