

**Hermann Selker**



# Truetzschler - Specialist for Spinning Preparation

**Luxor  
February, 2018**



# Trützschler Spinning





# Trützschler Spinning



# Trützschler Spinning





# Trützschler Spinning





# Trützschler Spinning





# Trützschler Spinning





# Truetzschler Spinning





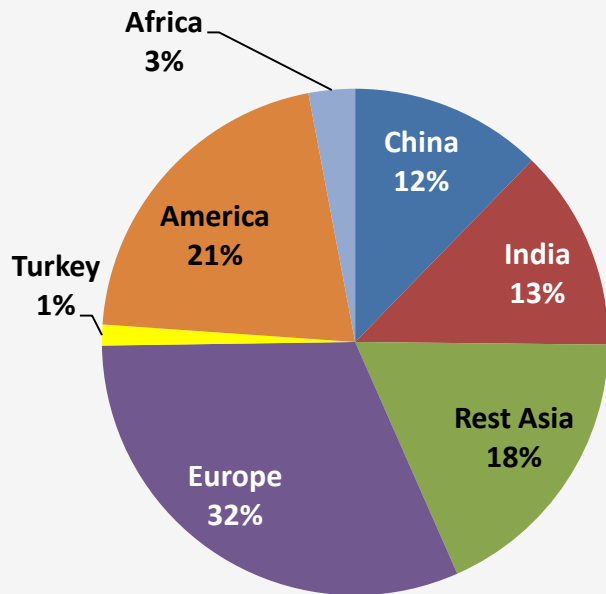
# Trützschler Spinning



# Developments of markets

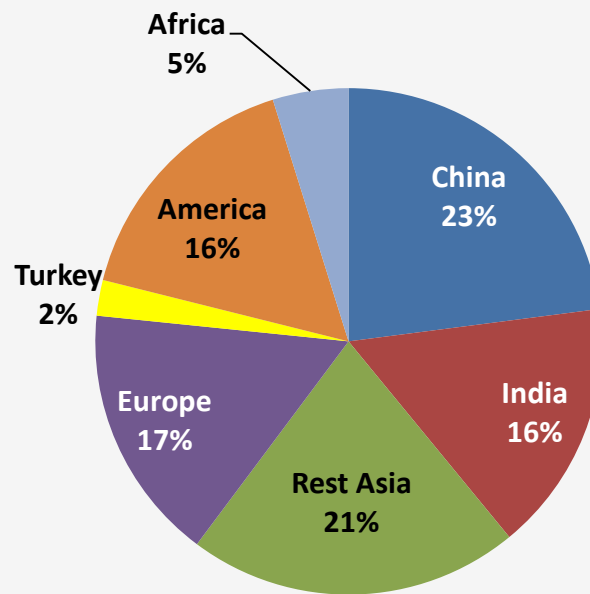
## Distribution of spinning capacities

1974



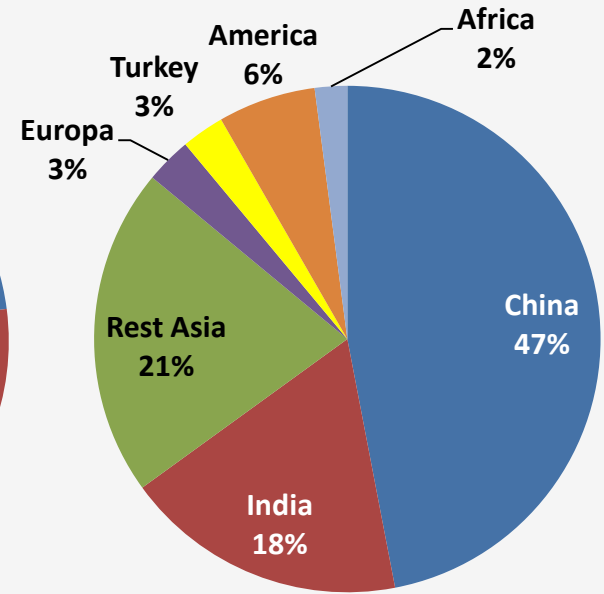
174

1990



208

2015



305

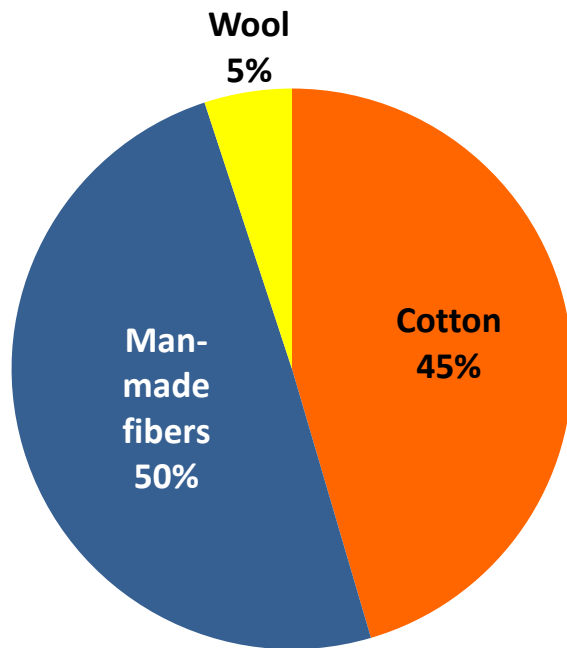
In million spindles (incl. rotors-equivalent)

Source:  
ITMF, 2015



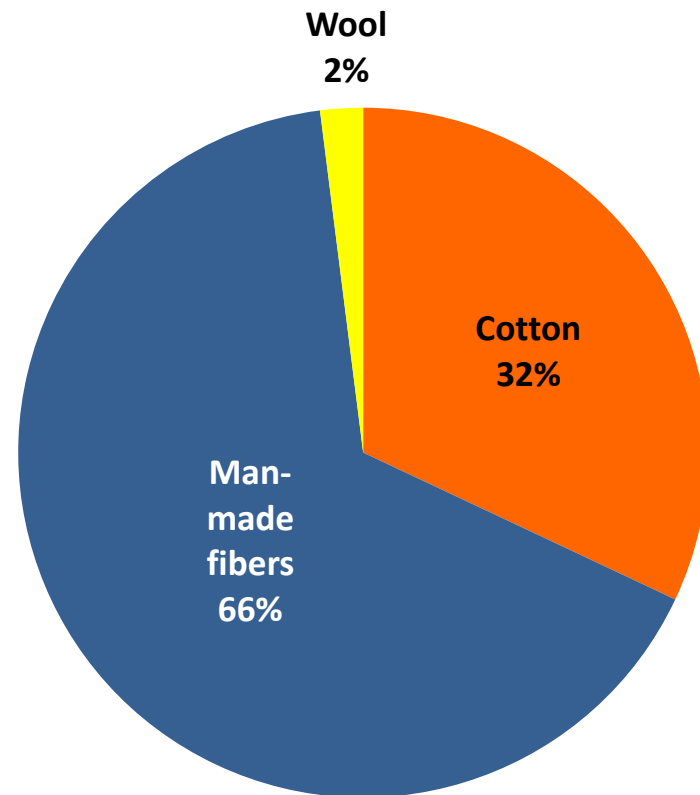
# Trend toward man-made fibers

**1990**



**38 million tons**

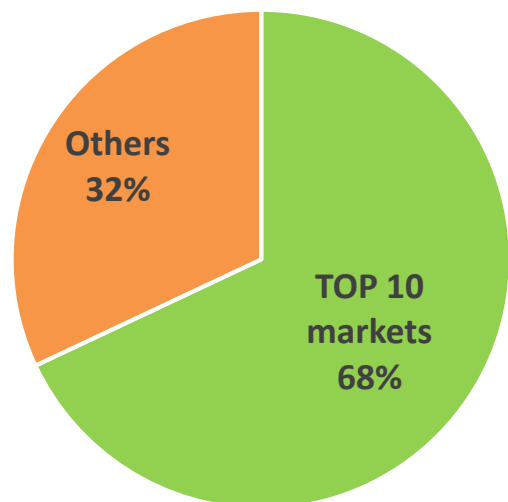
**today**



**70**

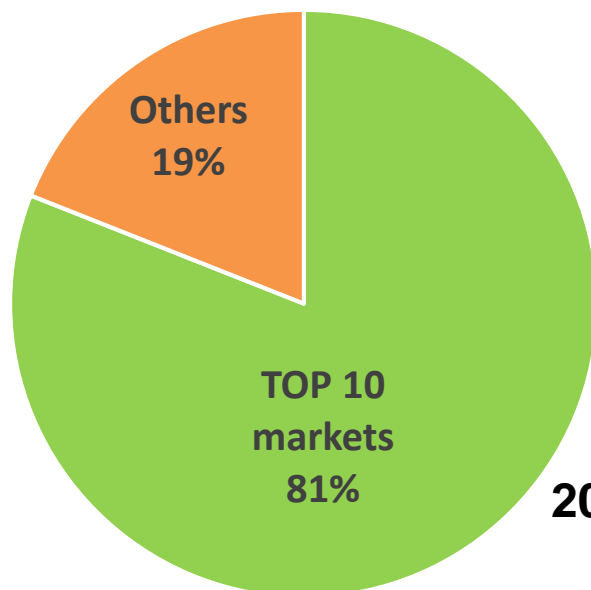
Source:  
ITMF, 2015

# Concentration on a few countries (card deliveries)

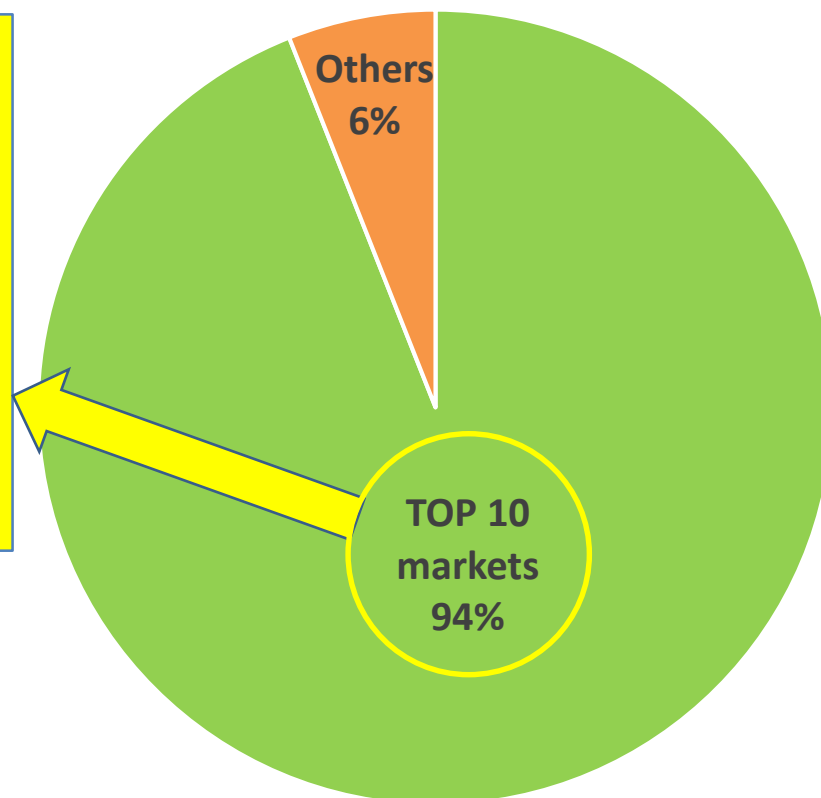


1991 - 1995

1. China
2. India
3. Turkey
4. Pakistan
5. Brazil
6. Bangladesh
7. Vietnam
8. Indonesia
9. Mexico
10. Uzbekistan



2001 - 2005



2011 - 2015

Source:  
ITMF, 2015



# Truetzschler History – The Founder

## 1888



**Paul Heinrich Trützschler and Bruno Gey found Trützschler in Crimmitschau, Saxony. Tearing machines and carding willows are the first products.**



# Trützschler today

- 
- **130 years experience**
  - **Specialist for spinning preparation**
  - **About 3,000 employees**
  - **Four production sites in Germany**
  - **Four production sites in USA, Brazil, China and India**
  - **Four business units**
    - **Spinning**
    - **Nonwovens**
    - **Man-made Fibers**
    - **Card Clothing**



## Family owned company in fourth generation



**Heinrich Trützschler and Dr.-Ing. Michael Schürenkrämer**  
**Shareholders and members of the Supervisory Board**

# The Management



**Dr. Dirk Burger**  
**(CEO since 2008)**



**Dr. Ralf**  
**Napiwotzki**  
**(CFO since 2015)**

**Dr. Christof Soest**  
**(CTO since 2018)**





# Four business units



## SPINNING

Machines for  
spinning mills



## NONWOVENS

Machines for  
nonwovens  
production



## MAN-MADE FIBERS

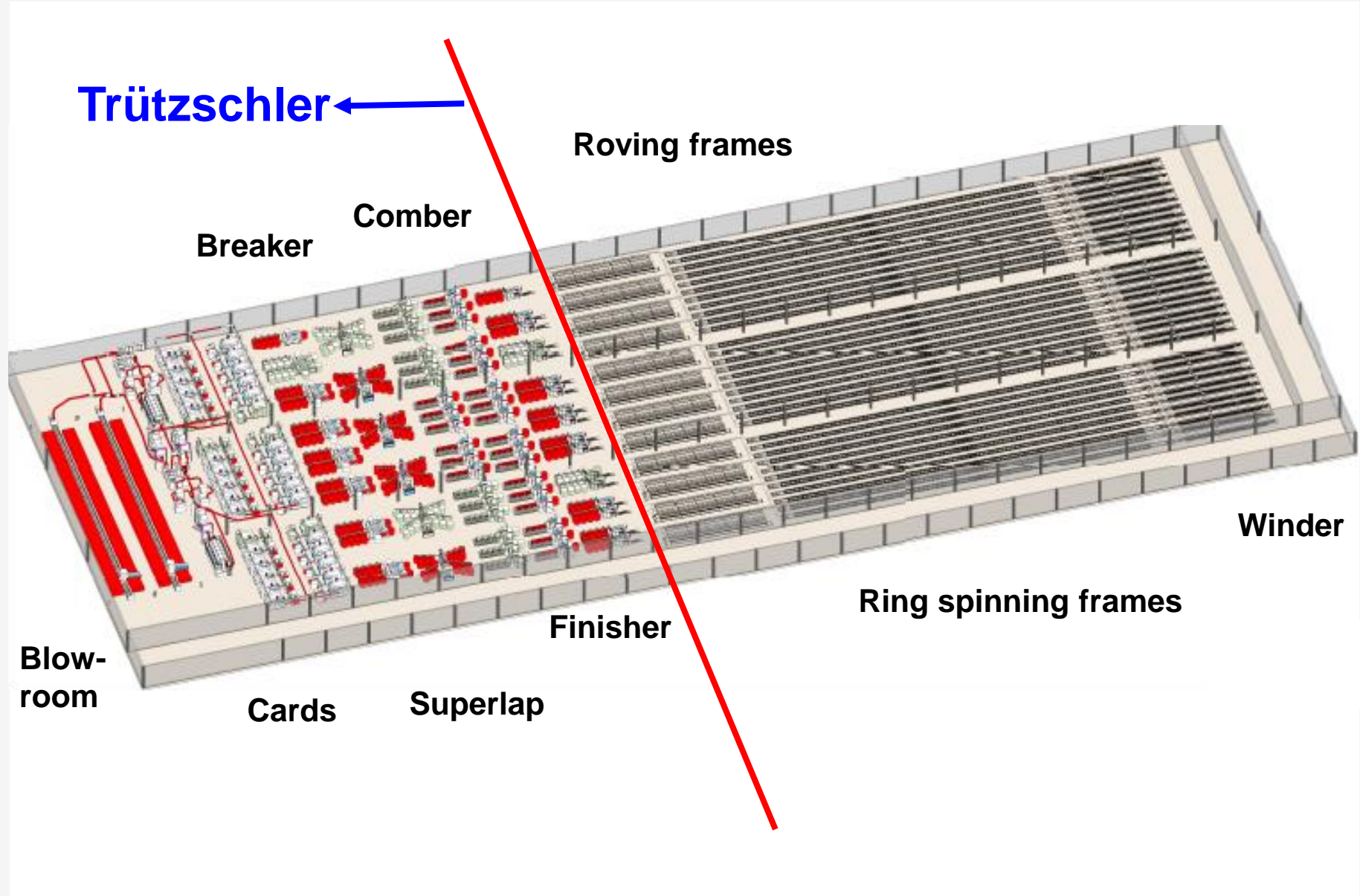
Machines for  
filament production



## CARD CLOTHING

Card clothing for  
cards and roller  
cards

# Spinning installation for ring yarns





# State of the art Blow Room Technology



# Cleaner CLEANOMAT CL-U

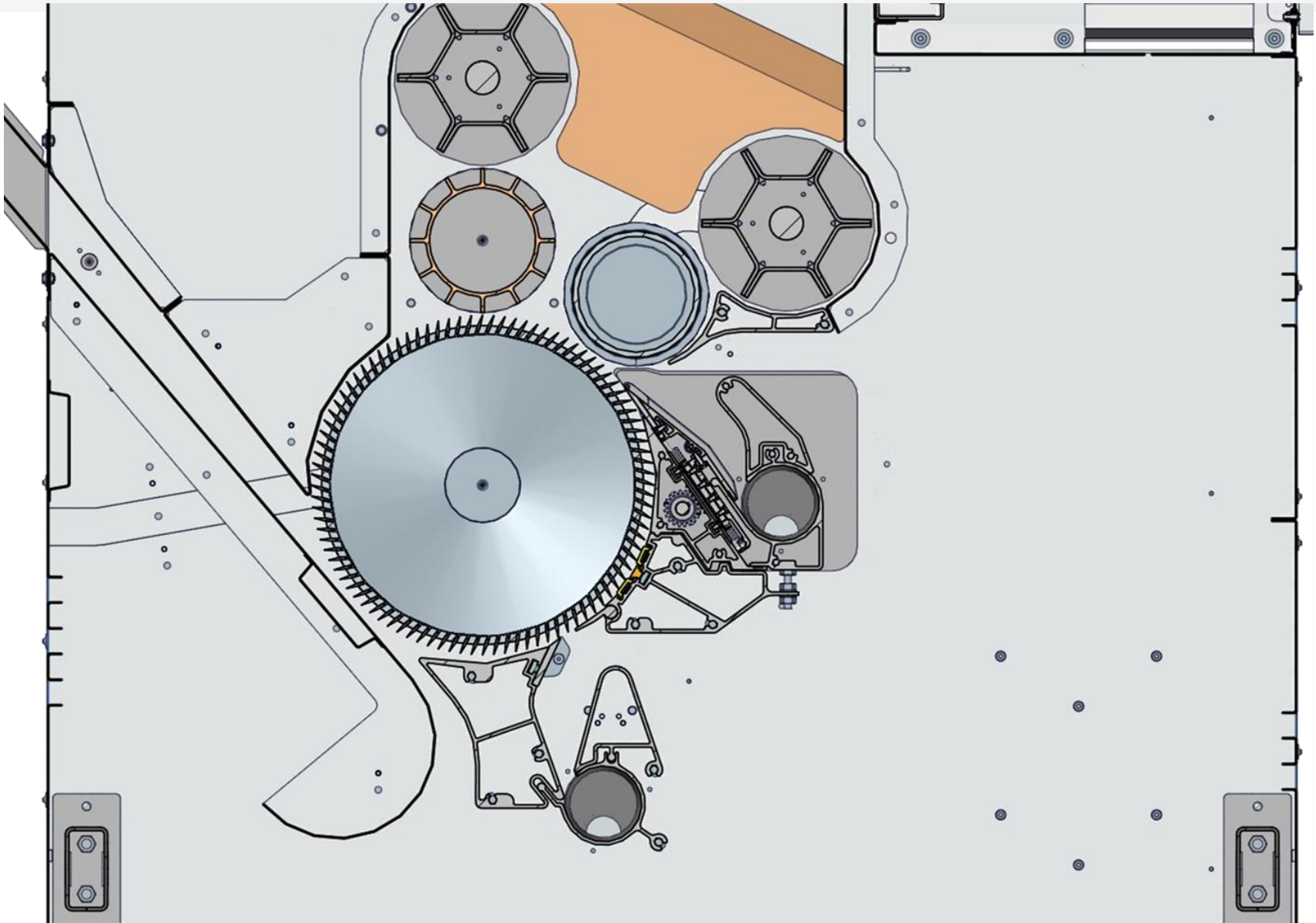




# Cleaner CLEANOMAT CL-U

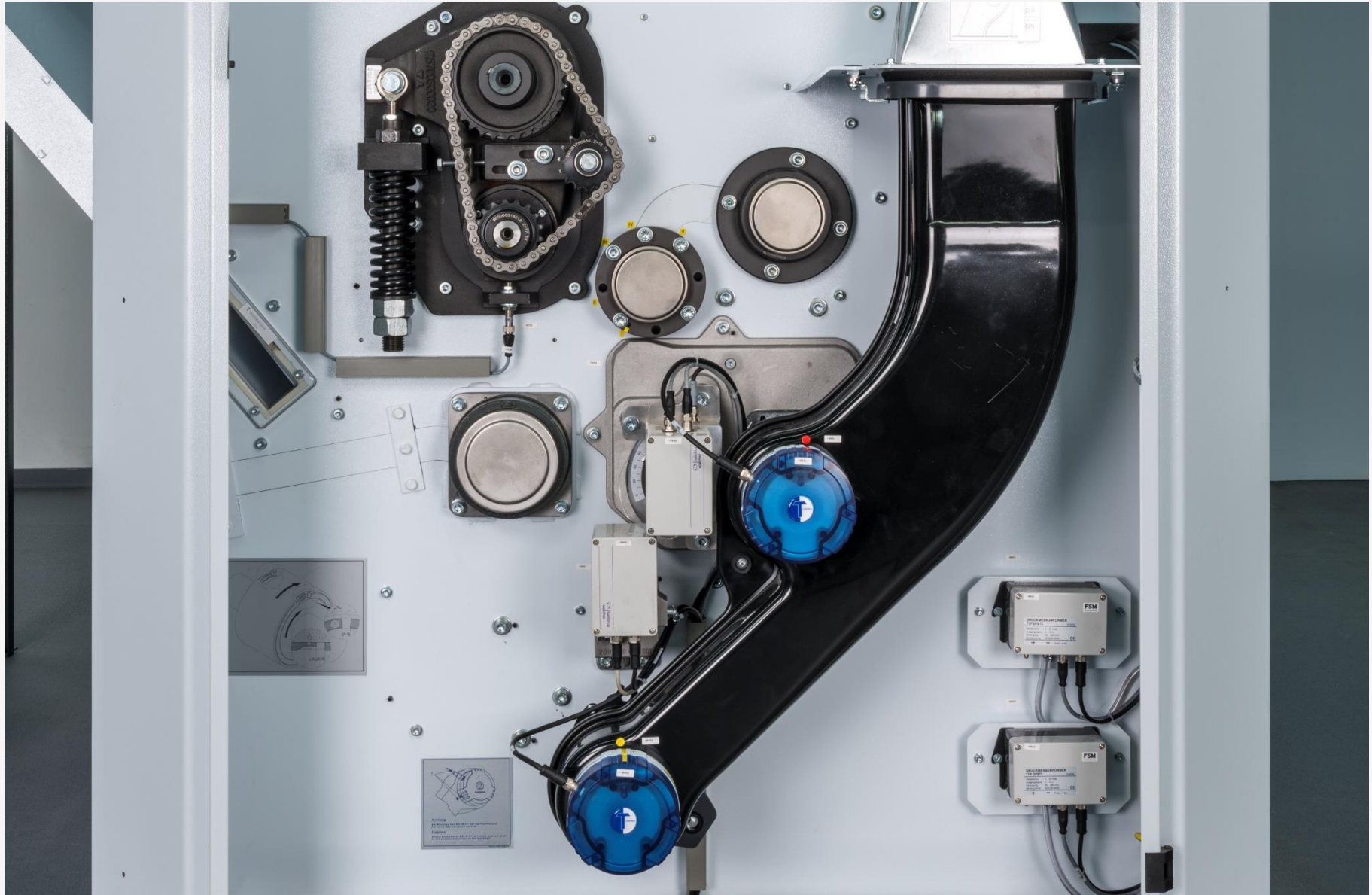


# Cleaner CLEANOMAT CL-U

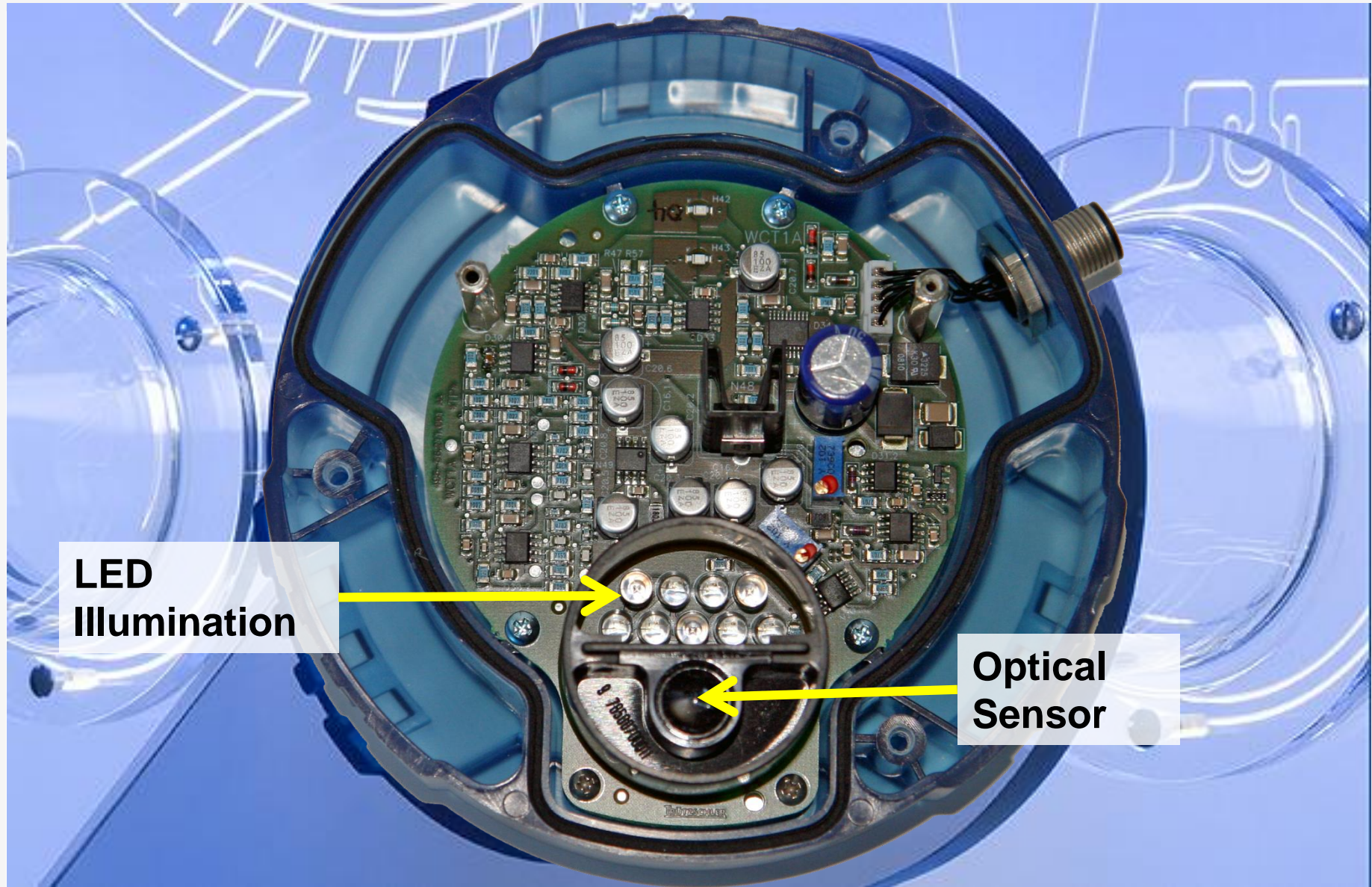




# Cleaner CLEANOMAT CL-U

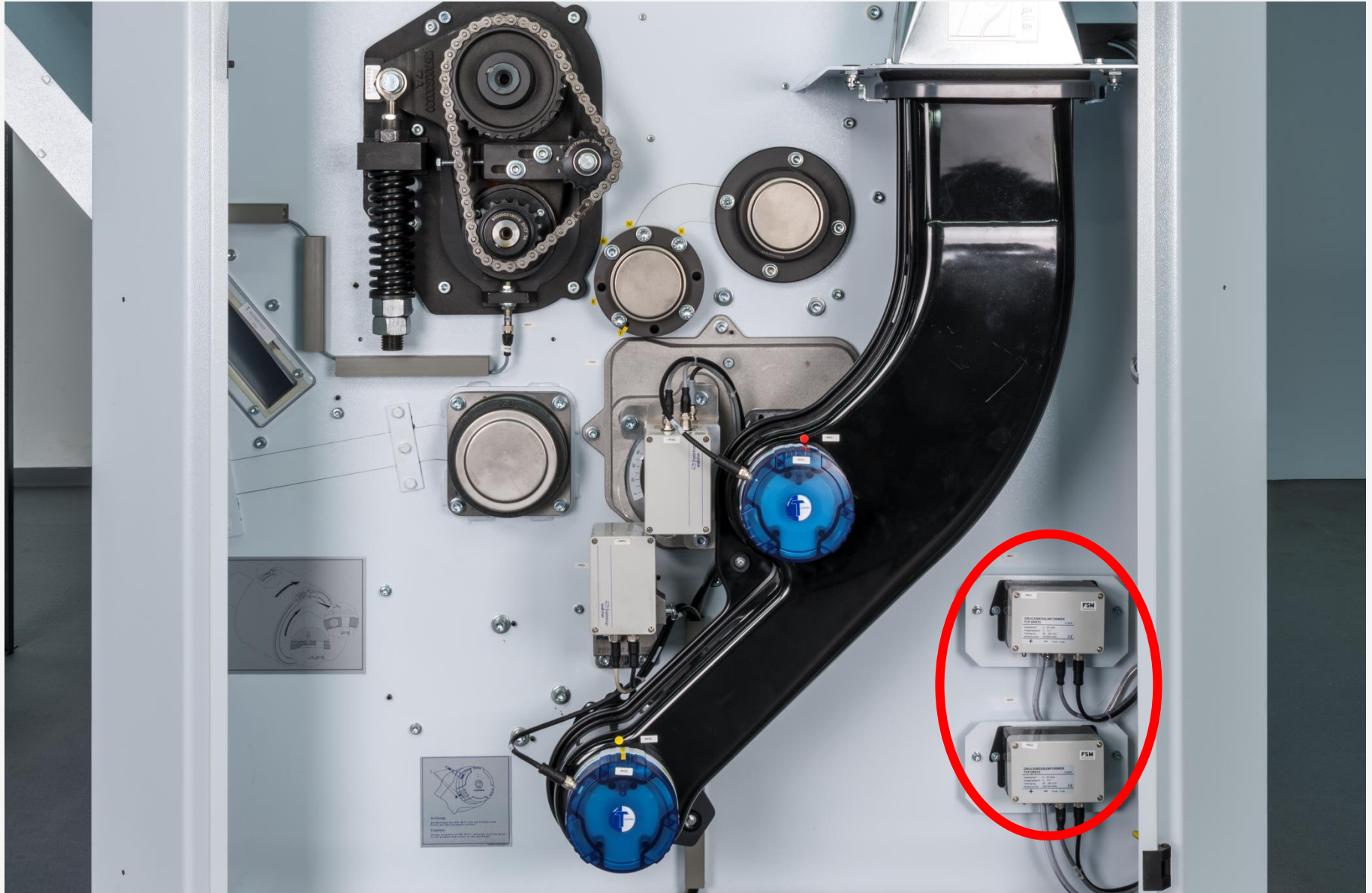


# Waste optimizing with WASTECONTROL





# Cleaner CLEANOMAT CL-U



# Universal Cleaner CLEANOMAT CL-U



**The CL-U is the universal cleaner for all applications.**





# Cards for ring- and air jet spinning





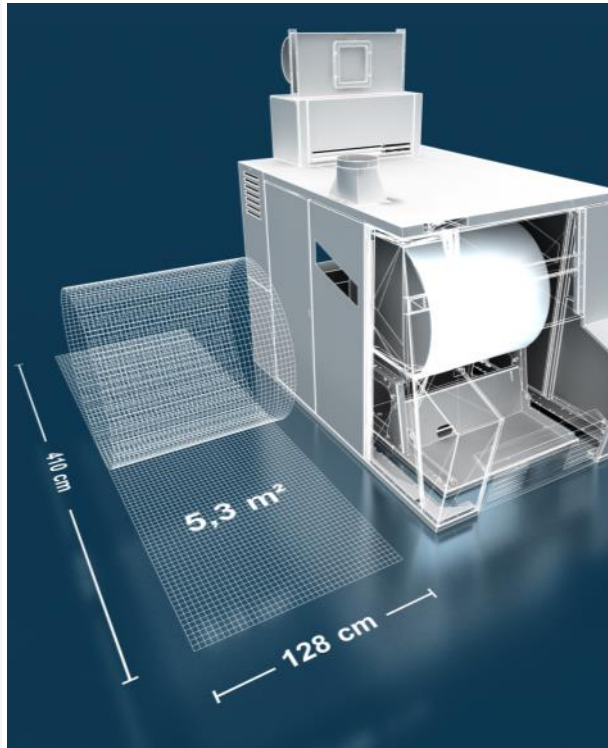
# Truetzschler Card TC 15





# Truetzschler Card TC 15

## TC 15 – Top 3 (out of 20) most Important USP's



**Largest carding area**



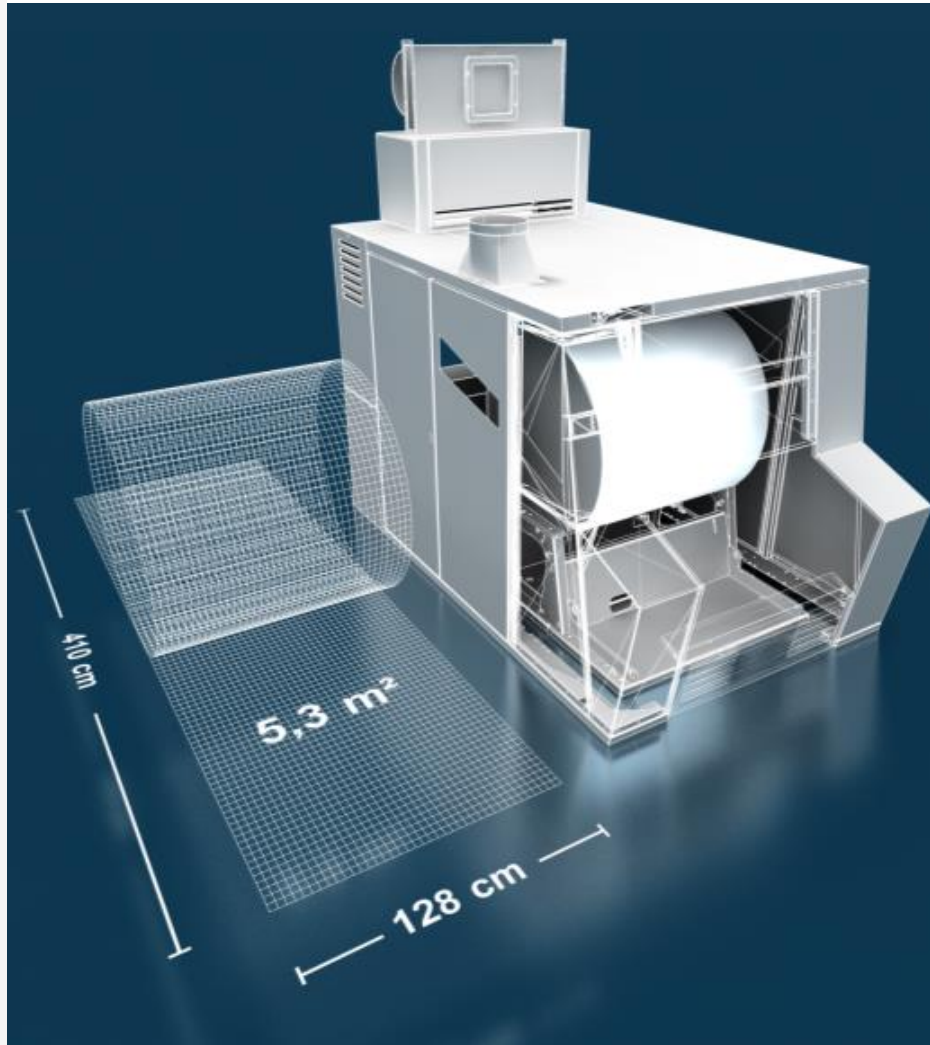
**MAGNOTOP**

**T-CON**



# Truetzschler Card TC 15

30 % larger carding area



**The Truetzschler card TC 15 is the card with the largest carding area**

- Highest productivity
- Large open area around the main cylinder for flexible component configurations for each application
- Lowest energy consumption
- Low carding costs



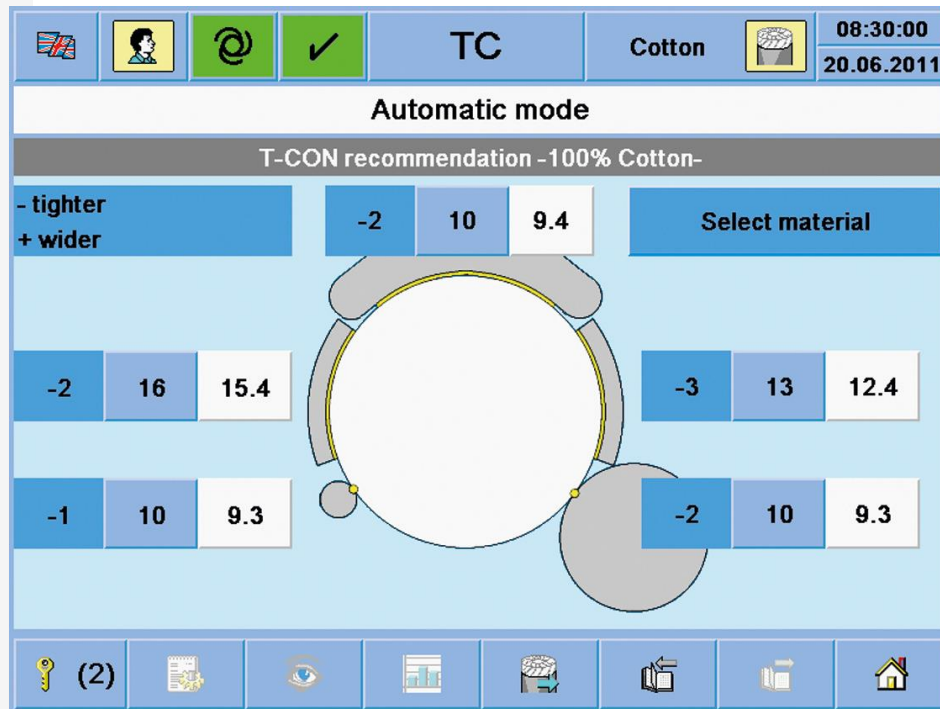
# TC 15 - MAGNOTOP



- **Flexibility in selection of different tops**
- **Flexibility in selection of different applications**
- **Elimination of flat workshop**
- **Elimination of service costs**
- **Elimination of spare sets**
- **Elimination of transport**

# Truetzschler Card TC 15

## T-CON for optimal card setting



- Production increase of 10% while maintaining the same yarn quality
- Easier, faster, more accurate and more specific card optimisation
- Warning, if settings are too close
- Automatic shutdown at component contact
- Optimization can be carried out in a targeted and reproducible way

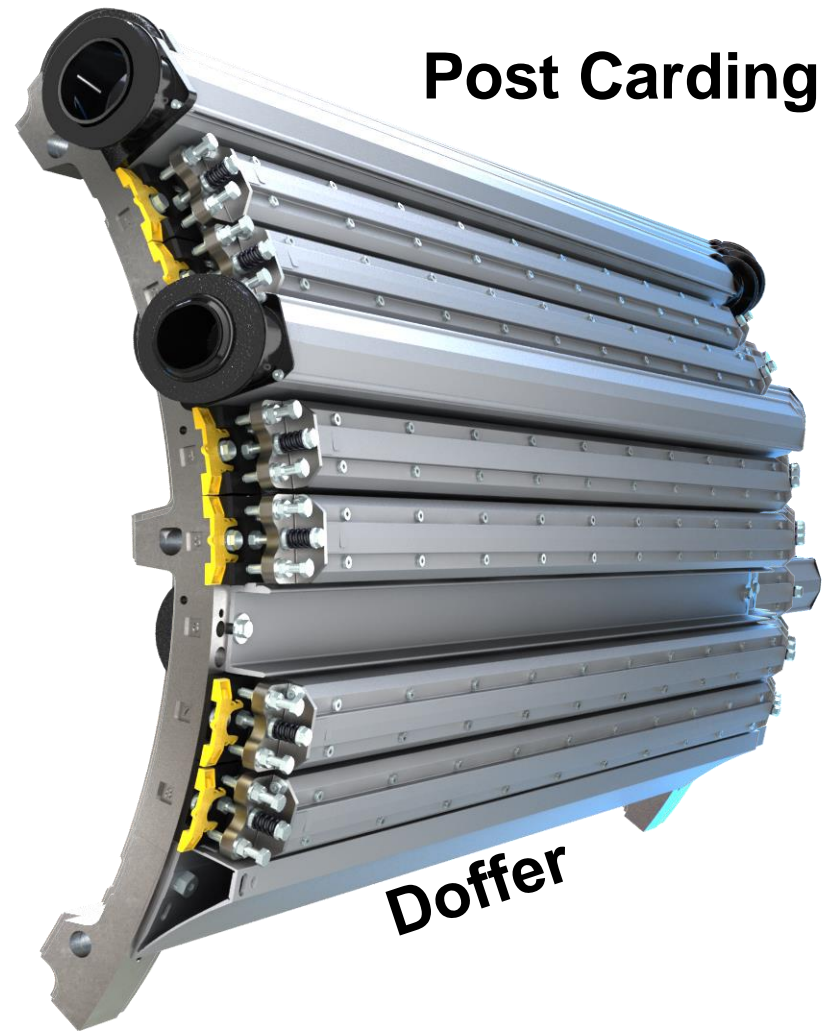


# MULTI WEBCLEAN SYSTEM

**Pre Carding**

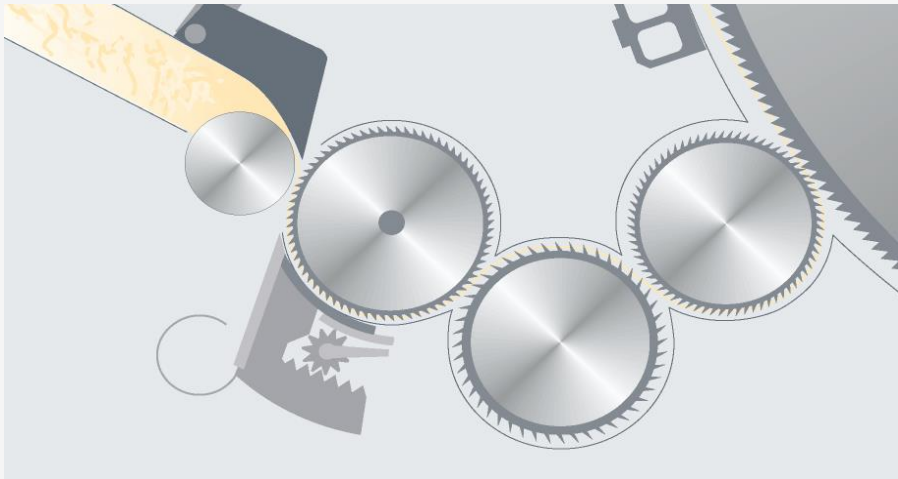


**Post Carding**



**Recycled Materials**

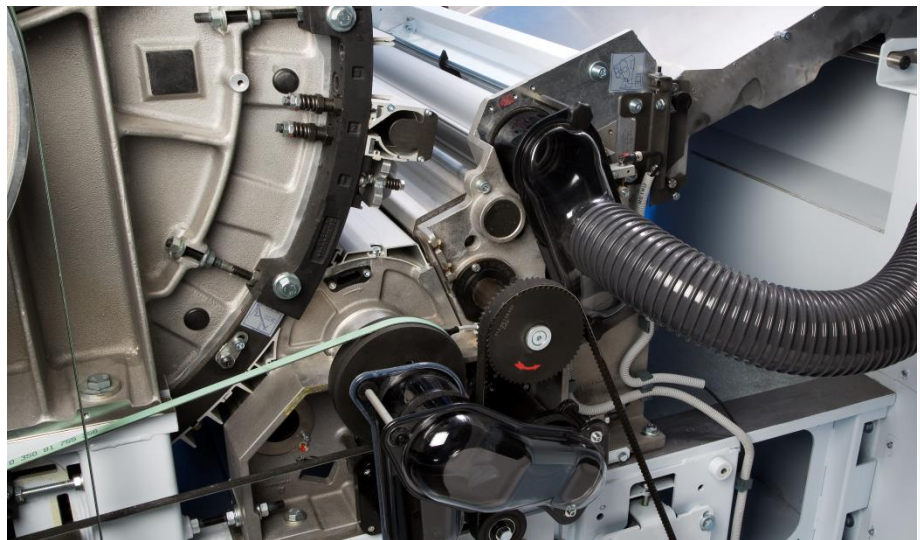
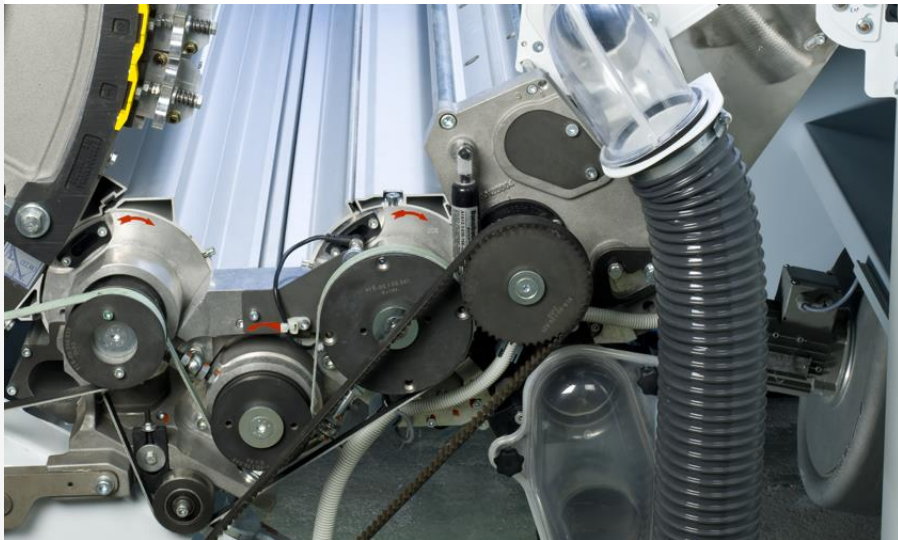
## TC 15 – One or three lick-in



**3 lick-in WEBFEED**



**1 lick-in WEBFEED**





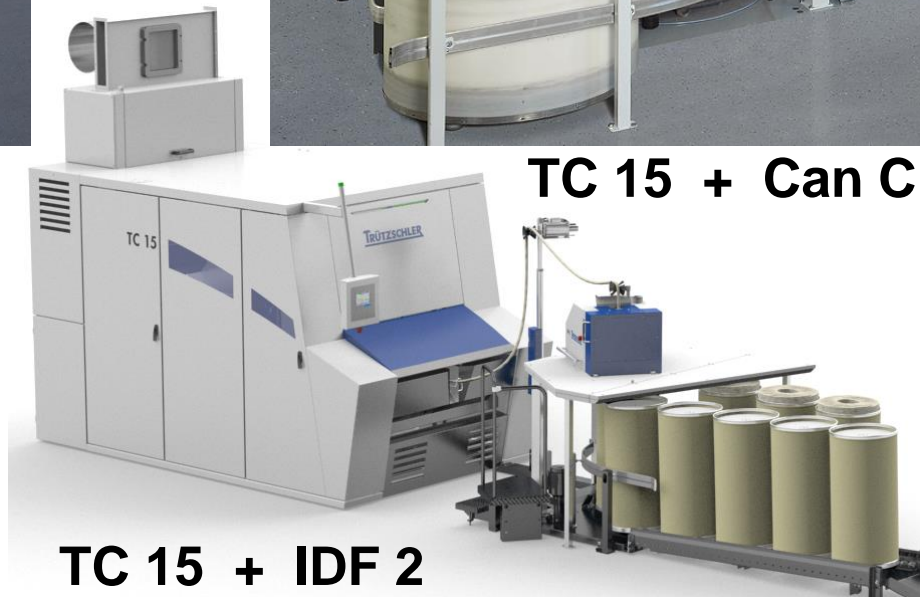
# TC 15 – Connecting different sliver coiling systems



**TC 15 + T-MOVE**



**TC 15 + Can Changer**



**TC 15 + IDF 2**

# TC 15 Card with T-MOVE Can Filling Station

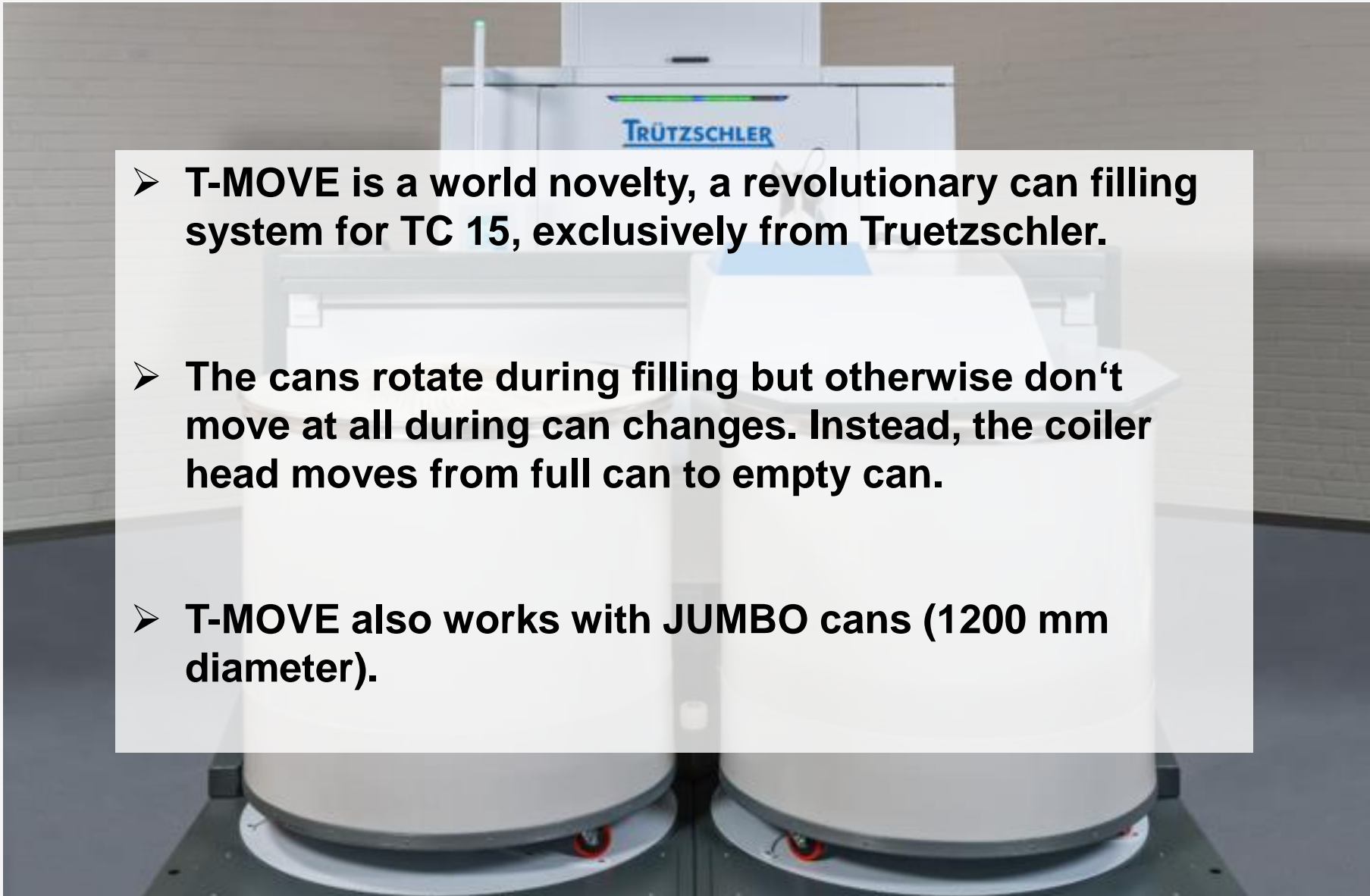




# Can filling station T-MOVE with moving head

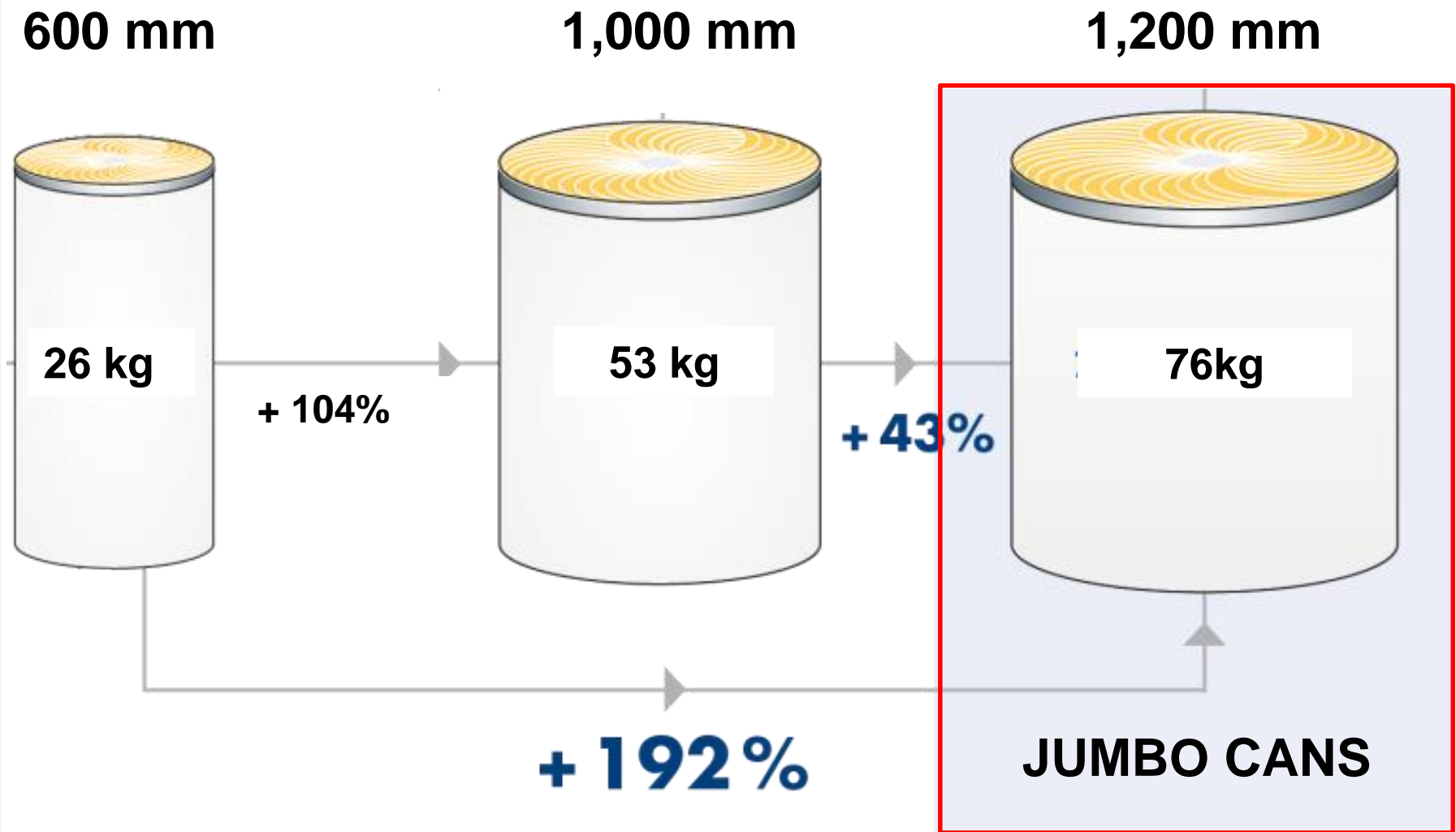


# T-MOVE Card Filling Station

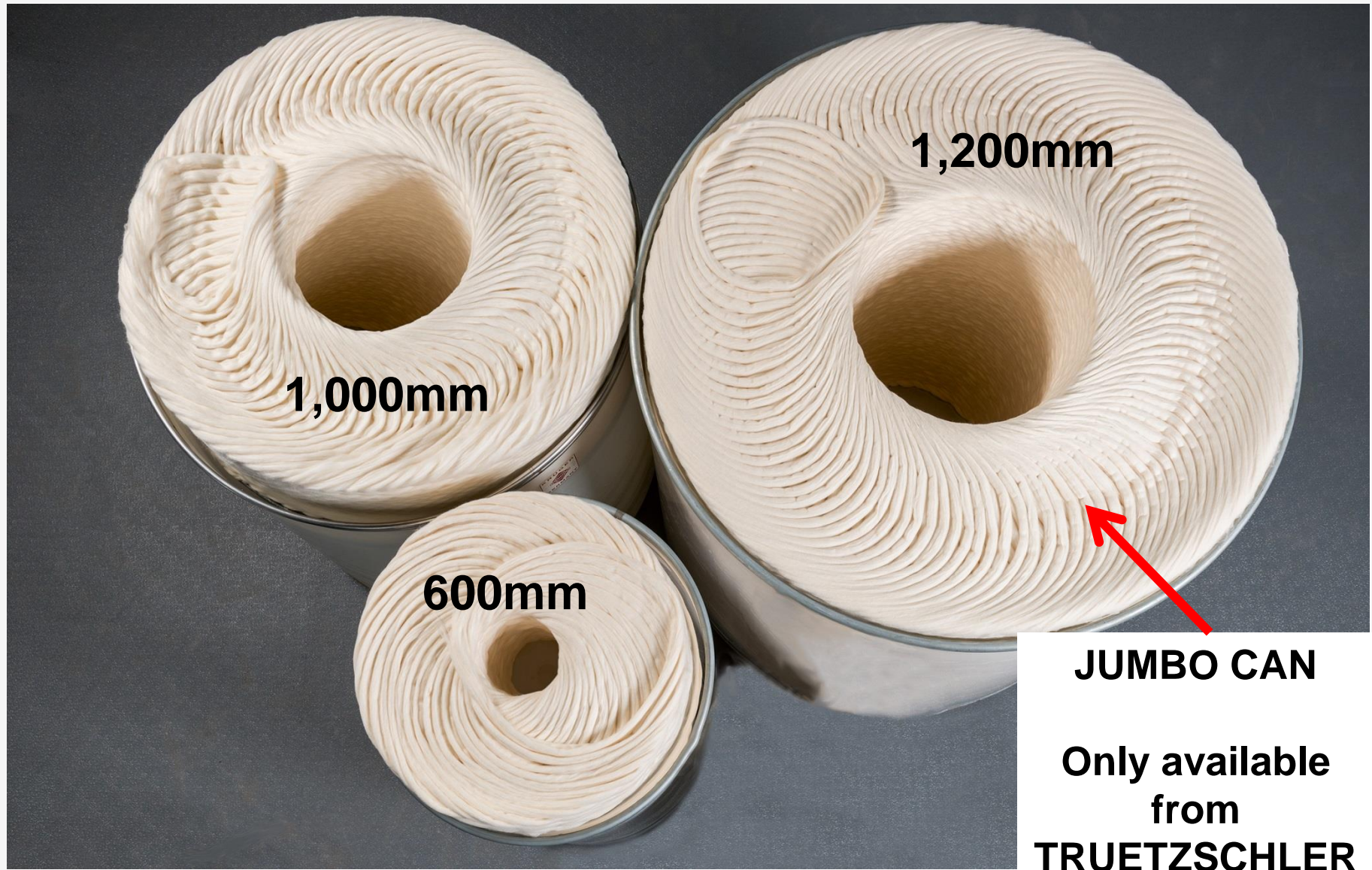
- 
- The background image shows a Truetzschler T-MOVE Card Filling Station. It is a large industrial machine with two large white cylindrical cans positioned side-by-side. The machine's upper section is white and features the 'TRÜTZSCHLER' logo in blue. A coiler head is visible above the cans, and the entire unit is mounted on a dark base with red leveling feet.
- **T-MOVE is a world novelty, a revolutionary can filling system for TC 15, exclusively from Truetzschler.**
  - **The cans rotate during filling but otherwise don't move at all during can changes. Instead, the coiler head moves from full can to empty can.**
  - **T-MOVE also works with JUMBO cans (1200 mm diameter).**



# T-MOVE Can Filling Station and JUMO CANS



## TC 15 – New Can Sizes





## JUMBO CANS - 1,200 mm

1,200 mm

1,000 mm

**The new efficiency -  
exclusively at Trützschler**

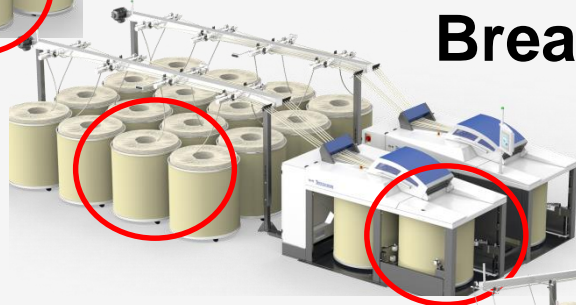
**43% more sliver in one can:**

- **Less can changes = higher efficiency**
- **Longer running time on downstream machine**
- **Less can transports**
- **Less sliver piecing's = Quality improvement**

# JUMBO CANS - 1,200 mm



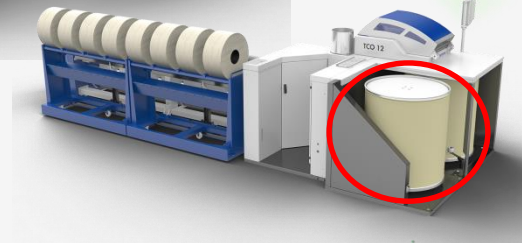
**Card**



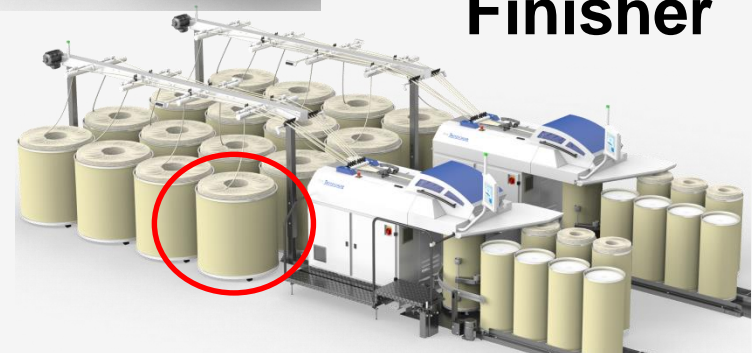
**Breaker**



**Superlap**



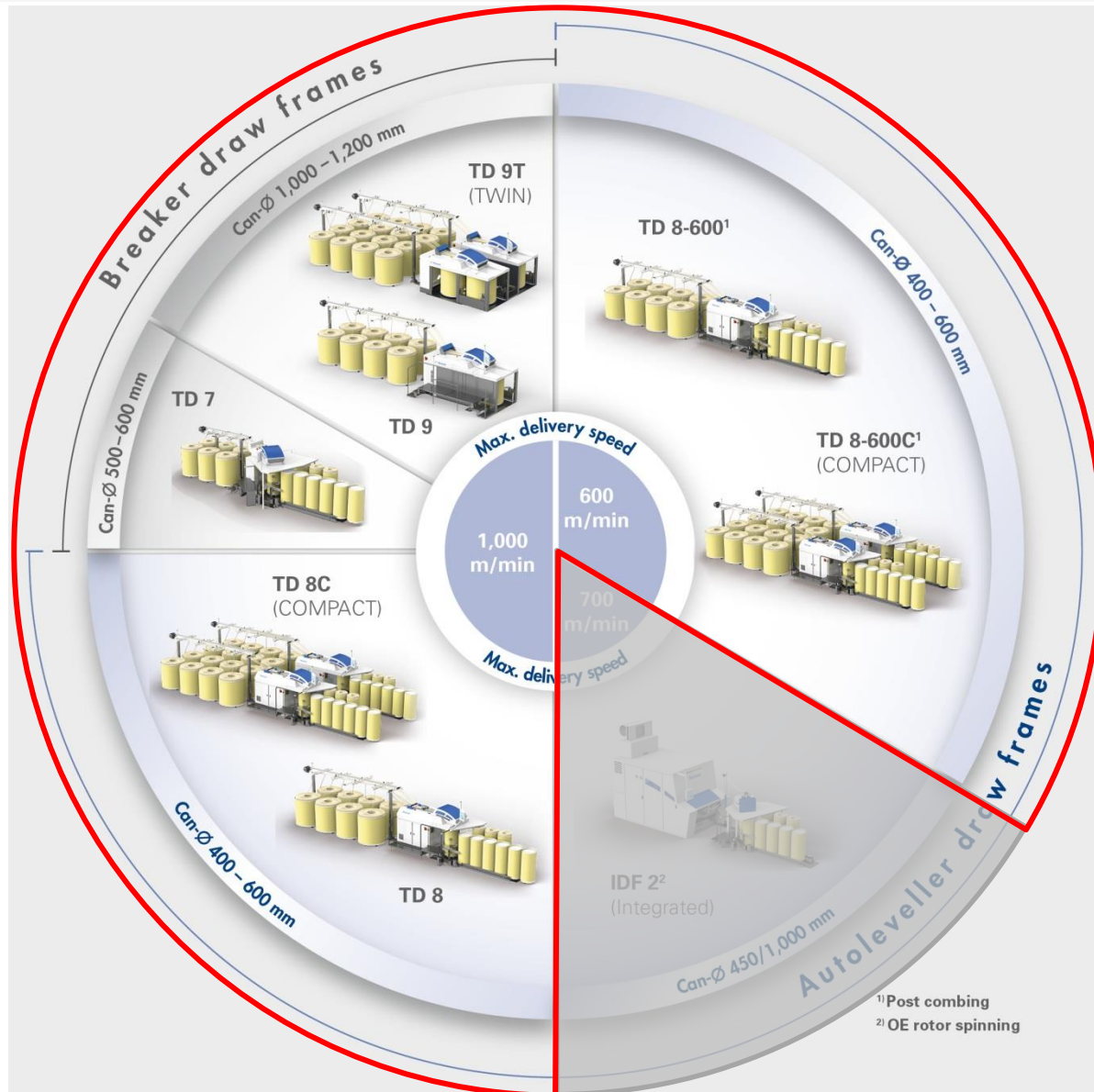
**Comber**



**Finisher**



# Trützschler Draw Frames for ring- and air jet spinning



# TWIN Draw Frame TD 9T

**No efficiency coupling by means of separate drives**



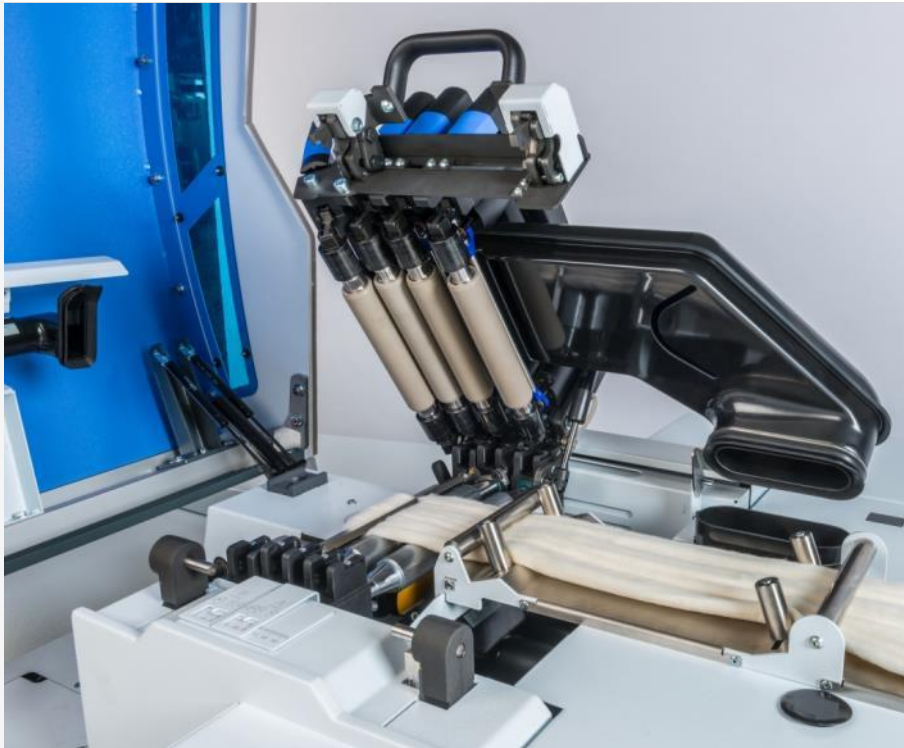
**Others: Efficiency =  $0.89 \times 0.89 = 0.79$**

**TWIN concept: Efficiency =  $0.89 \times 1.00 = 0.89$**



# TWIN Draw Frame TD 9T

**The breaker draw frame with the elements of the Truetzschler TD 8 auto leveller Draw Frame**



- 4-over-3 drafting system
- Pneumatic loading of top rolls
- Pneumatic threading aid
- Self-adjusting lap monitoring

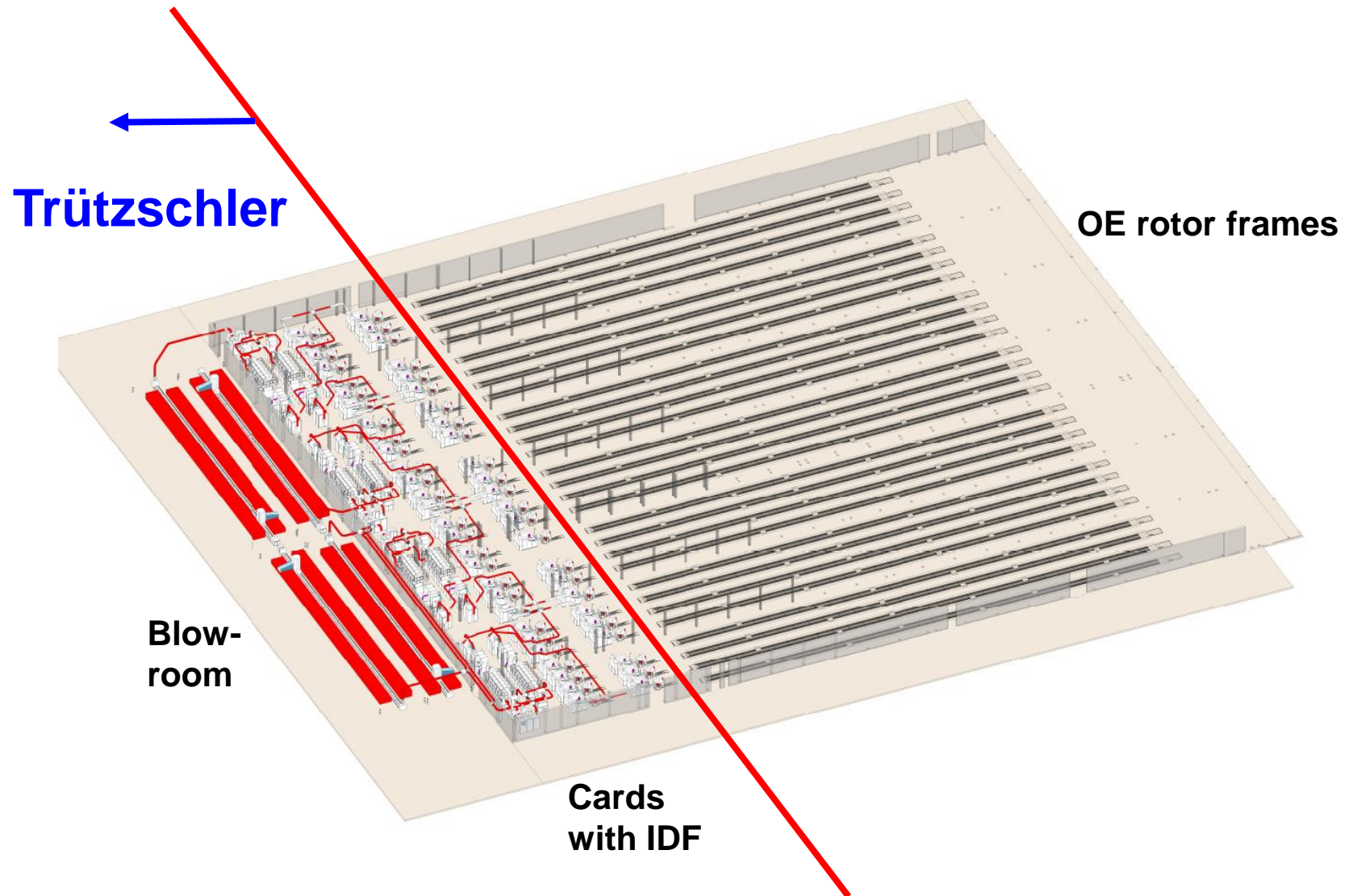
- Coloured touch screen
- All creel variations
- Coiler plate with hydro-polished tube

# Trützschler Finisher Draw Frames for ring- and air jet spinning

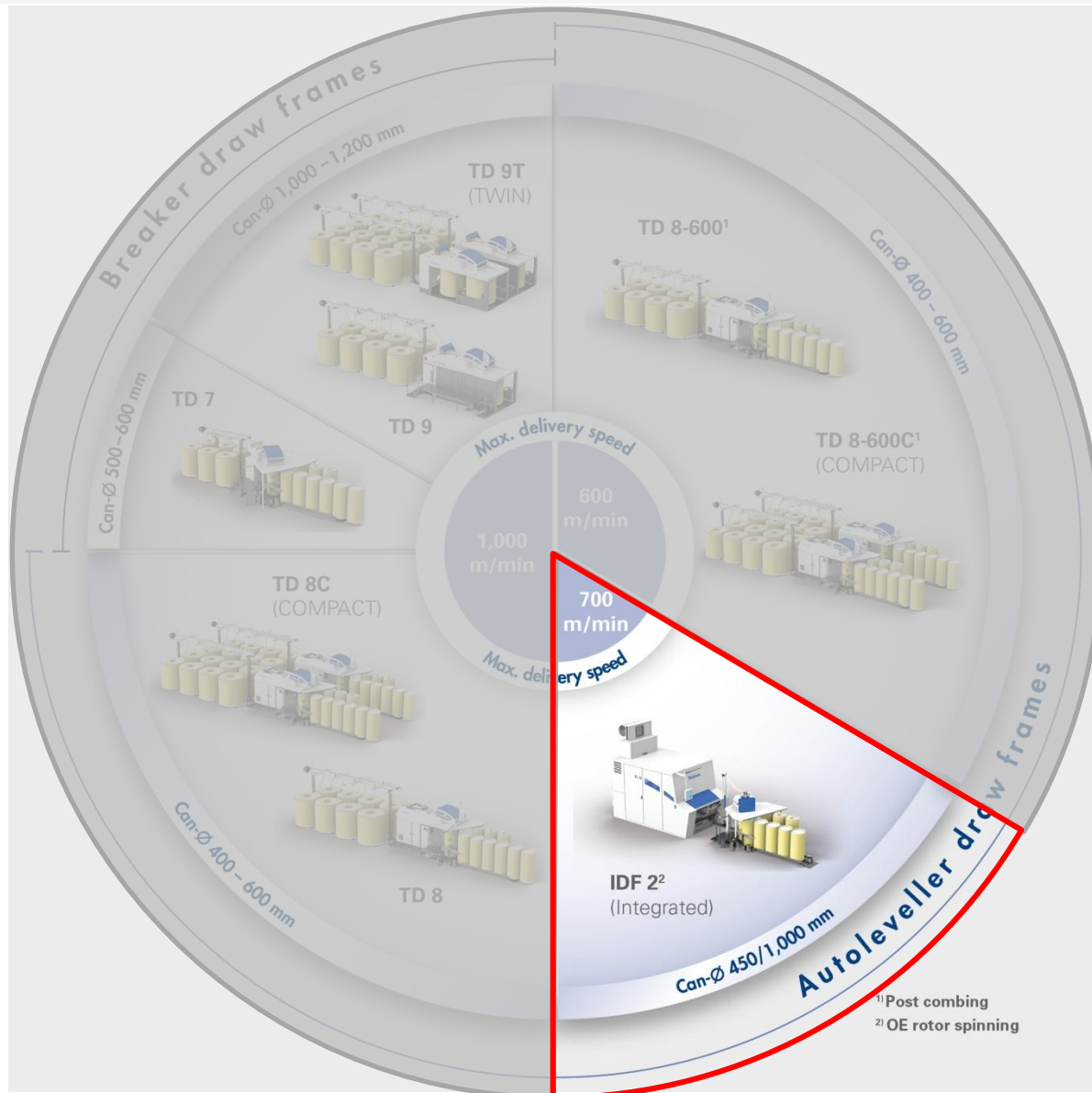




# Spinning installation for rotor yarns



# IDF 2 – the Auto Leveller Draw Frame for rotor spinning





# Trützschler Cards for rotor spinning



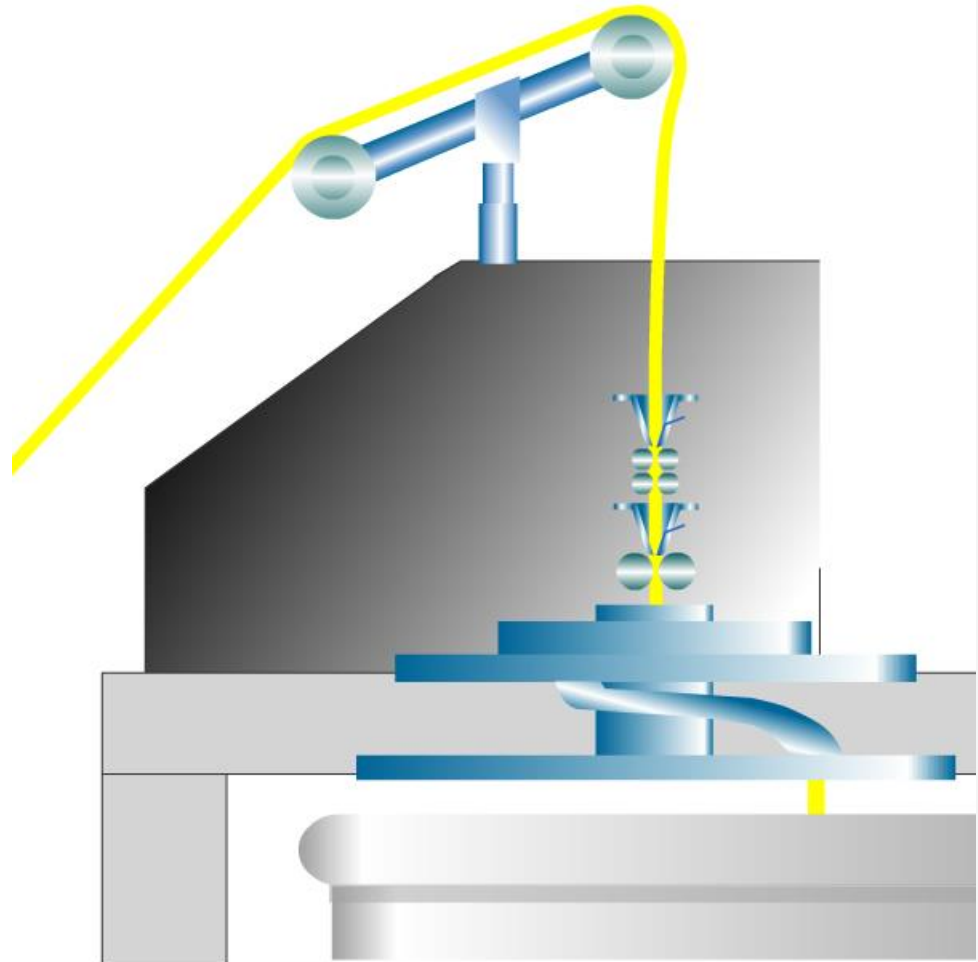
# Integrated Draw Frame IDF 2



**Reduced production costs  
+  
Improved yarn quality**

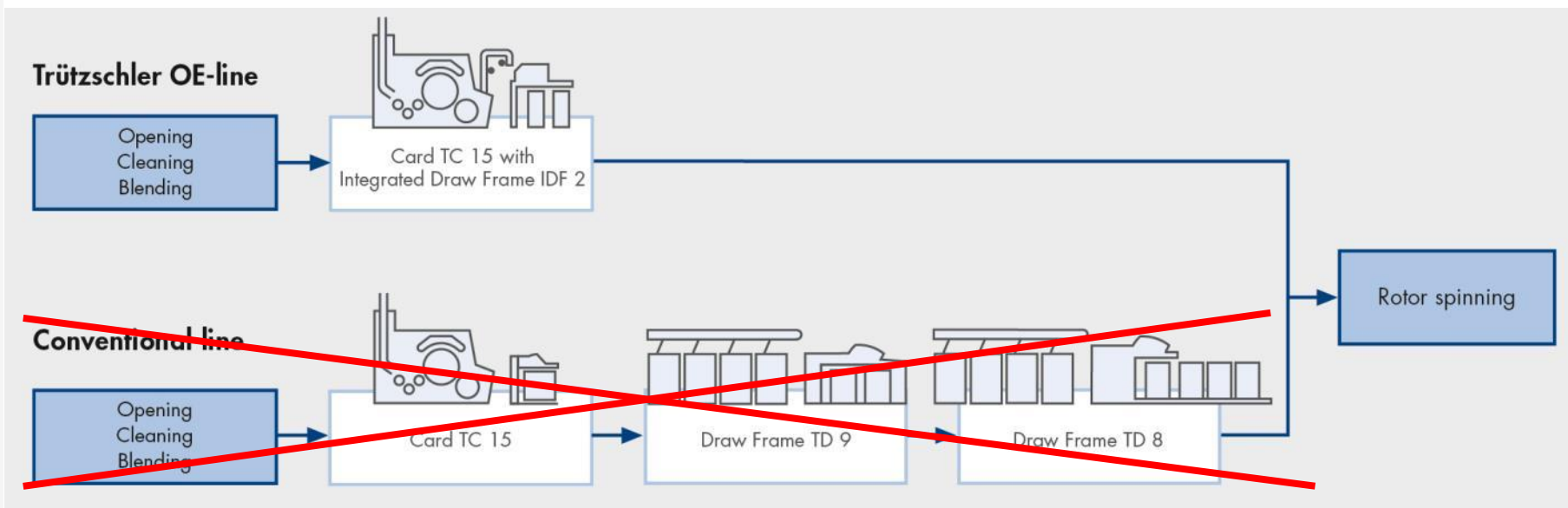


# Integrated Draw Frame IDF 2



# Integrated Draw Frame IDF 2

## Improved efficiency with less machines

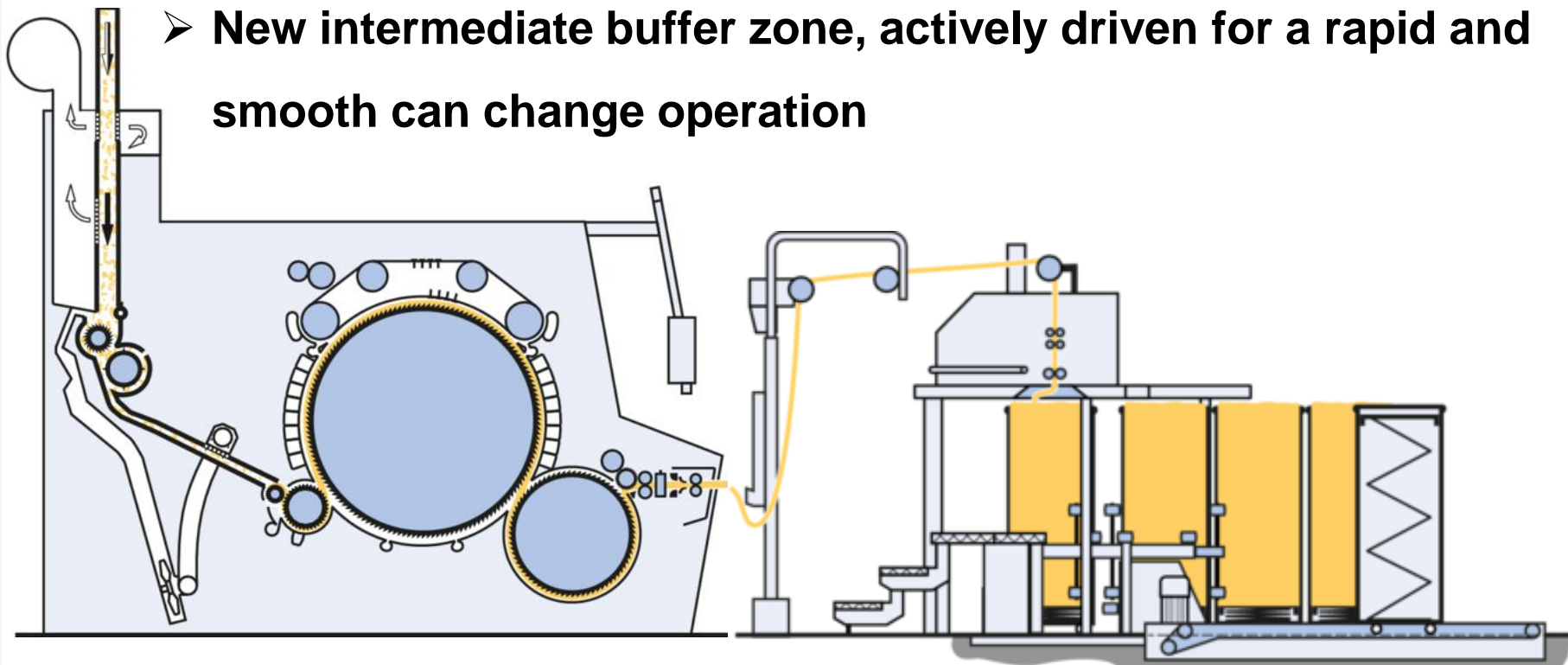


**Direct spinning with Integrated Draw Frame IDF 2**

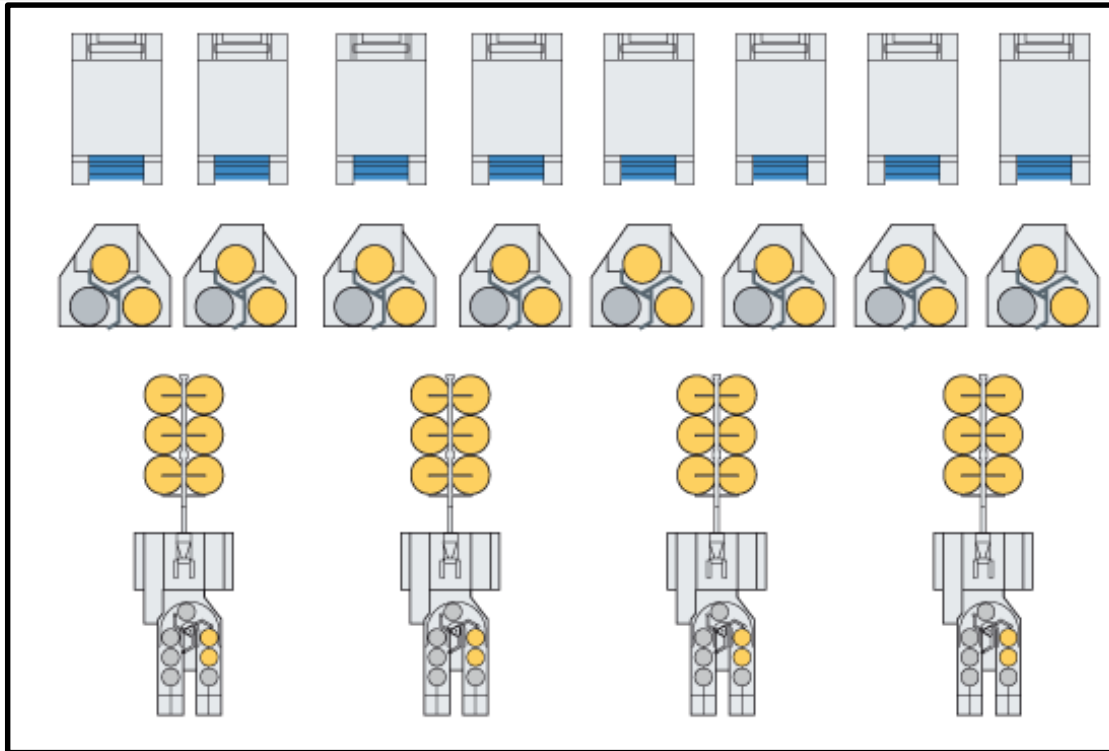


# Integrated Draw Frame IDF 2

- 2-over-2 roller drafting system, specially developed for OE direct spinning
- Higher delivery speed up to 700 m/min
- Service life of top rollers doubled due to asymmetrical design
- New intermediate buffer zone, actively driven for a rapid and smooth can change operation



# Integrated Draw Frame IDF 2

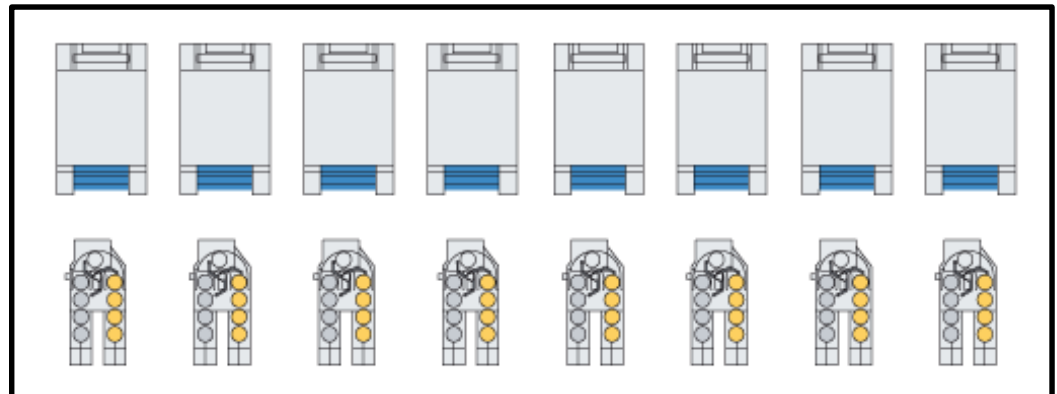


**540 m<sup>2</sup>**

**48% less space  
requirement due to  
Integrated Draw  
Frame IDF**

**280 m<sup>2</sup>**

- Less operation
- Lower energy consumption
- Fewer cans
- Fewer can transports, etc.

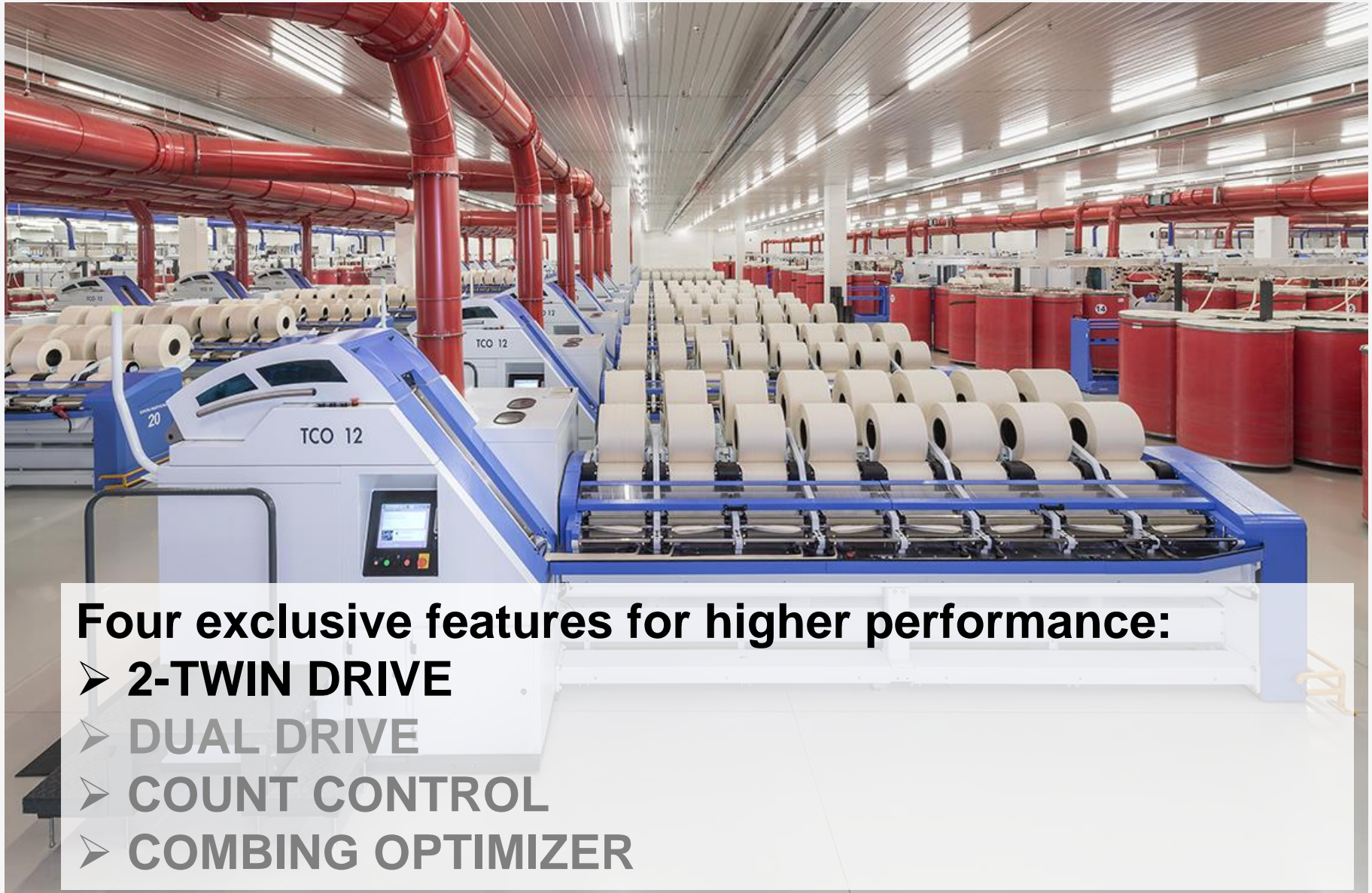




# Truetzschler Comber TCO 12



# Truetzschler Comber TCO 12



**Four exclusive features for higher performance:**

- **2-TWIN DRIVE**
- **DUAL DRIVE**
- **COUNT CONTROL**
- **COMBING OPTIMIZER**

# TCO 12 – 2-TWIN DRIVE



# Truetzschler Comber TCO 12

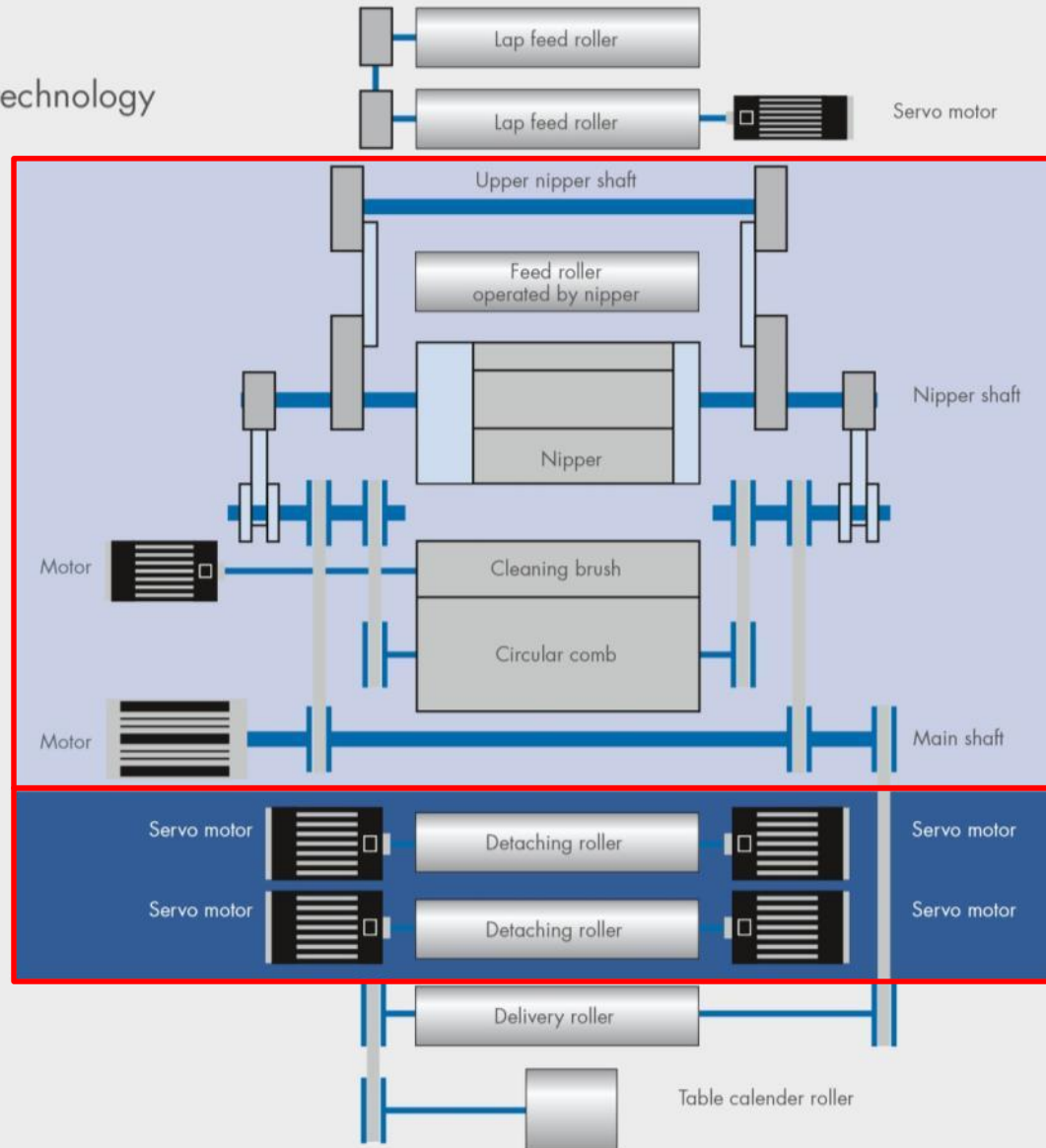


## Four exclusive features for higher performance:

- **2-TWIN DRIVE**
- **DUAL DRIVE**
- **COUNT CONTROL**
- **COMBING OPTIMIZER**

# TCO 12 – DUAL DRIVE and 2-TWIN-DRIVE

Toyota  
combing technology



# Truetzschler Comber TCO 12

**Four exclusive features for higher performance:**

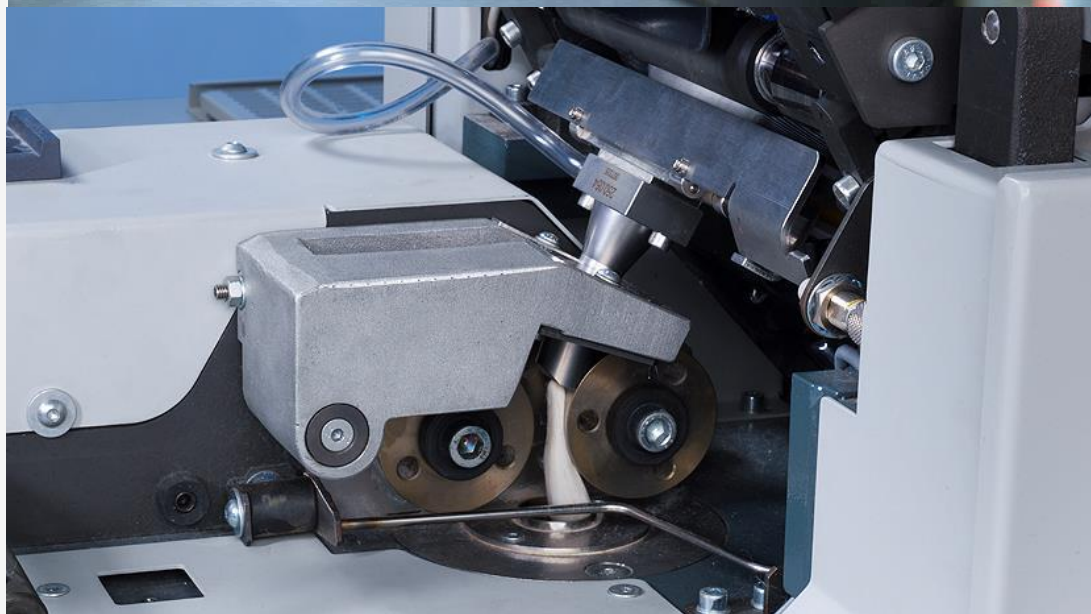
- 2-TWIN DRIVE
- DUAL DRIVE
- **COUNT CONTROL**
- COMBING OPTIMIZER





## TCO 12 - COUNT CONTROL

- **Count control is a levelling system.**
- **The quality sensor determines the sliver count and transmits the signal to the control, which varies the main draft accordingly.**
- **This feature keeps the sliver count constant.**



**DISK MONITOR**  
for permanent  
Quality monitoring

# Truetzschler Comber TCO 12

**Four exclusive features for higher performance:**

- **2-TWIN DRIVE**
- **DUAL DRIVE**
- **COUNT CONTROL**
- **COMBING OPTIMIZER**



# TCO 12 – JUMBO CANS



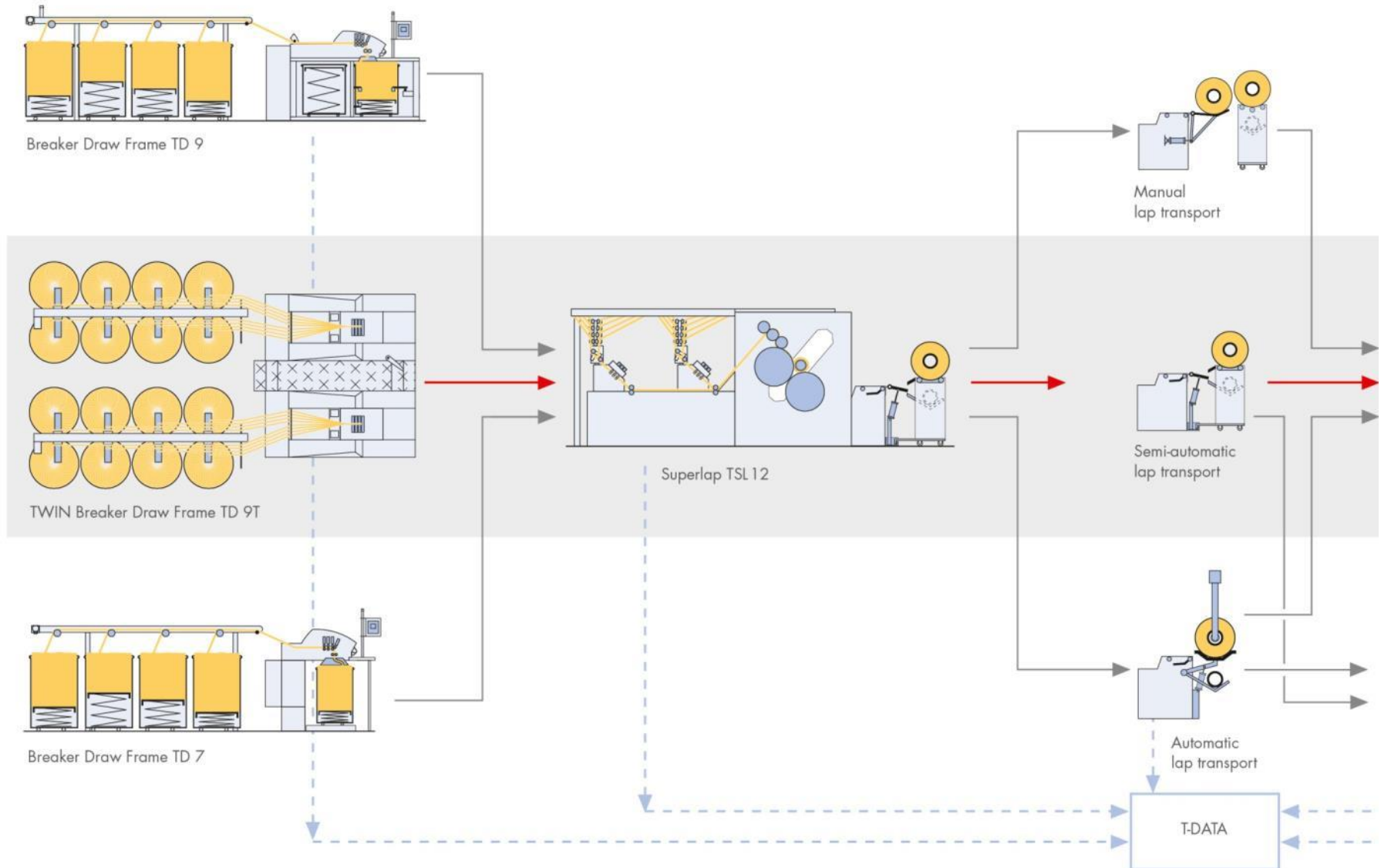
**Comber TCO 12 with  
can changer for  
JUMBO CANS**

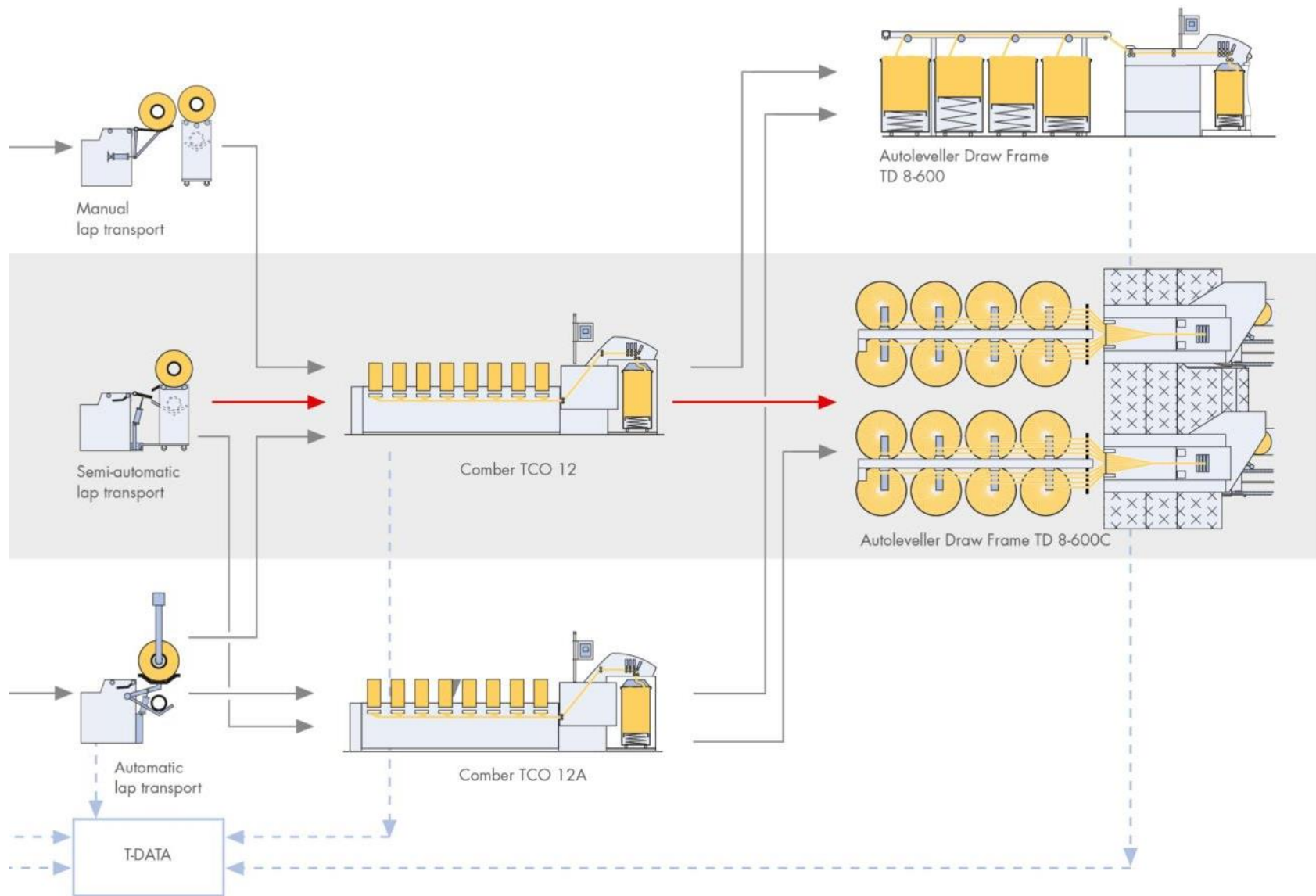
**The Can Changer is  
underfloor for easy  
can handling**



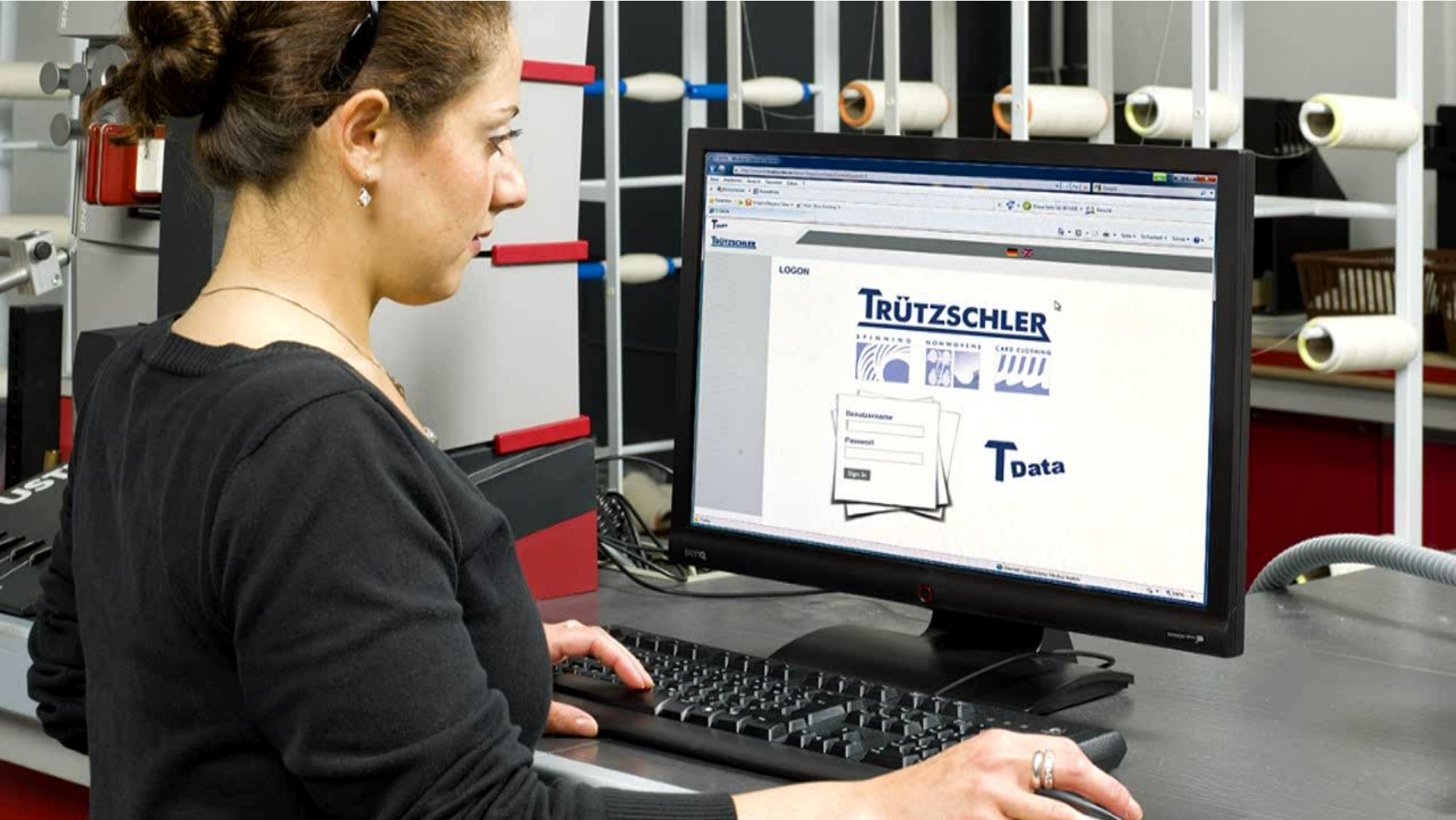


# Truetzschler Combing System





# T-DATA – Introduction





# T-DATA

## ➤ Innovation

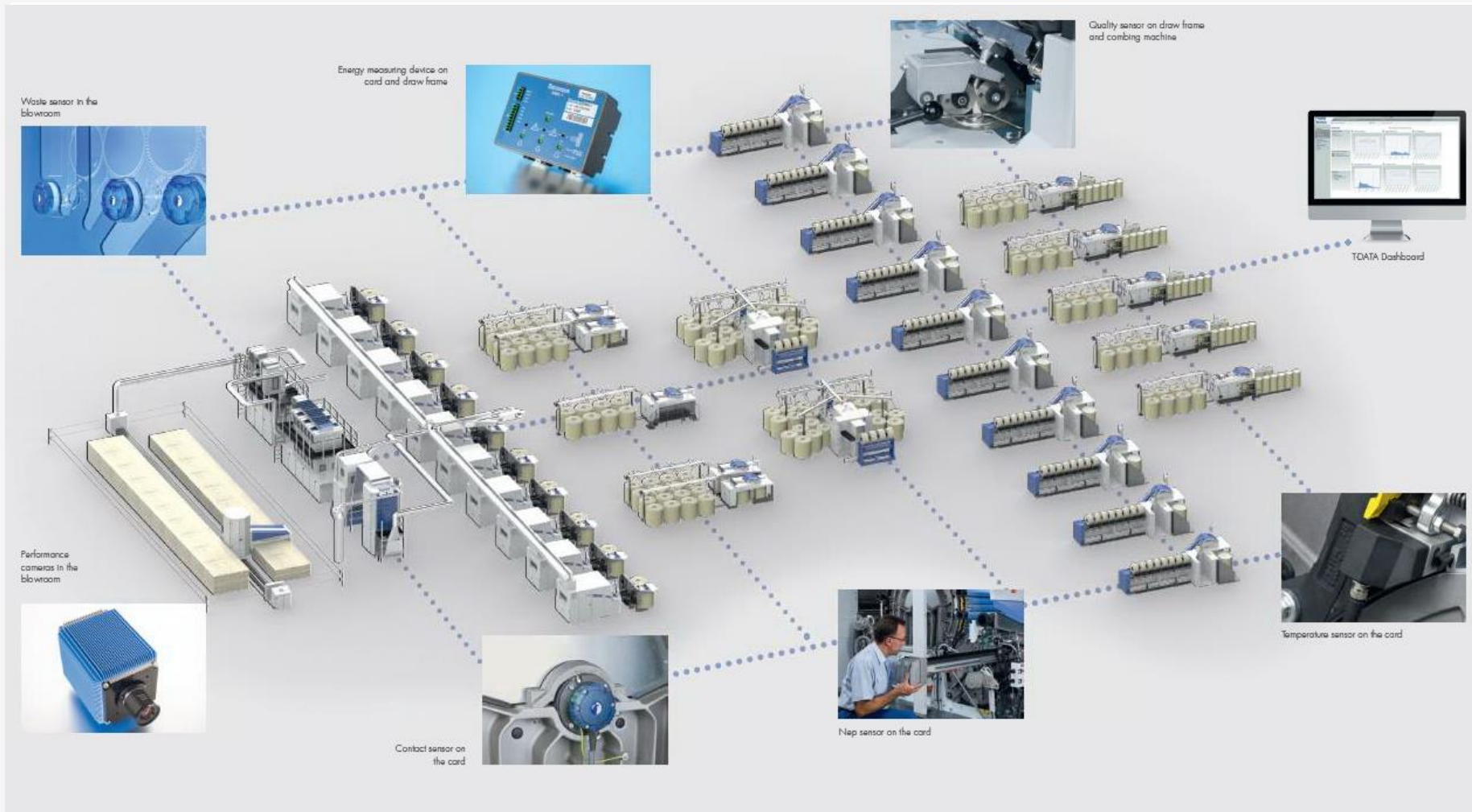
- New dimension of data quality
- Mobility
- Integration into customers' systems

## ➤ Customer benefits

- Mill monitoring
- Production process analysis
- Individual settings
- Downtime reduction

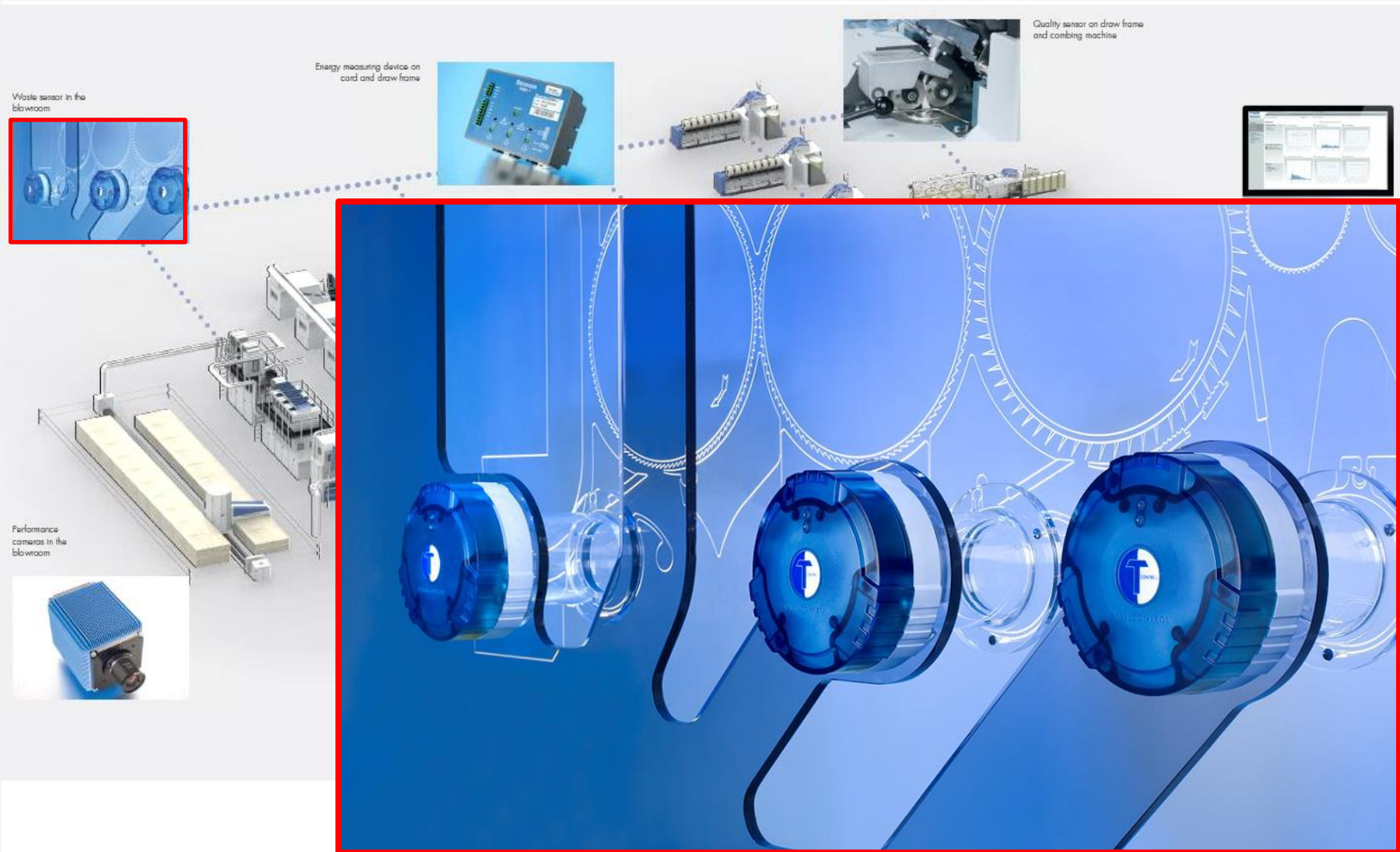


# High-end Sensor Technology “Made by Truetzschler”



**The right sensors at the right places**

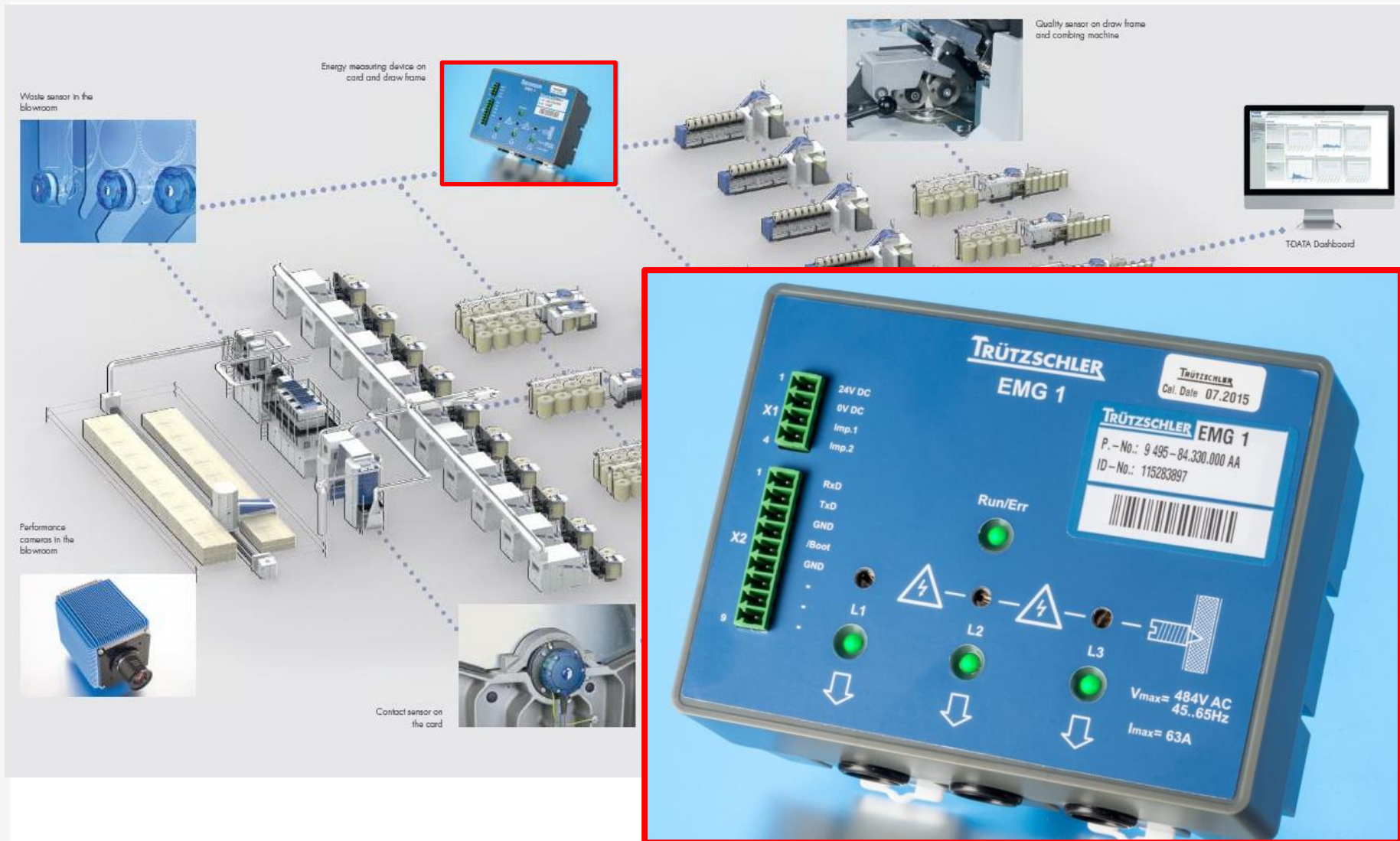
# High-end Sensor Technology “Made by Truetzschler”



**Waste sensors in the blow room**

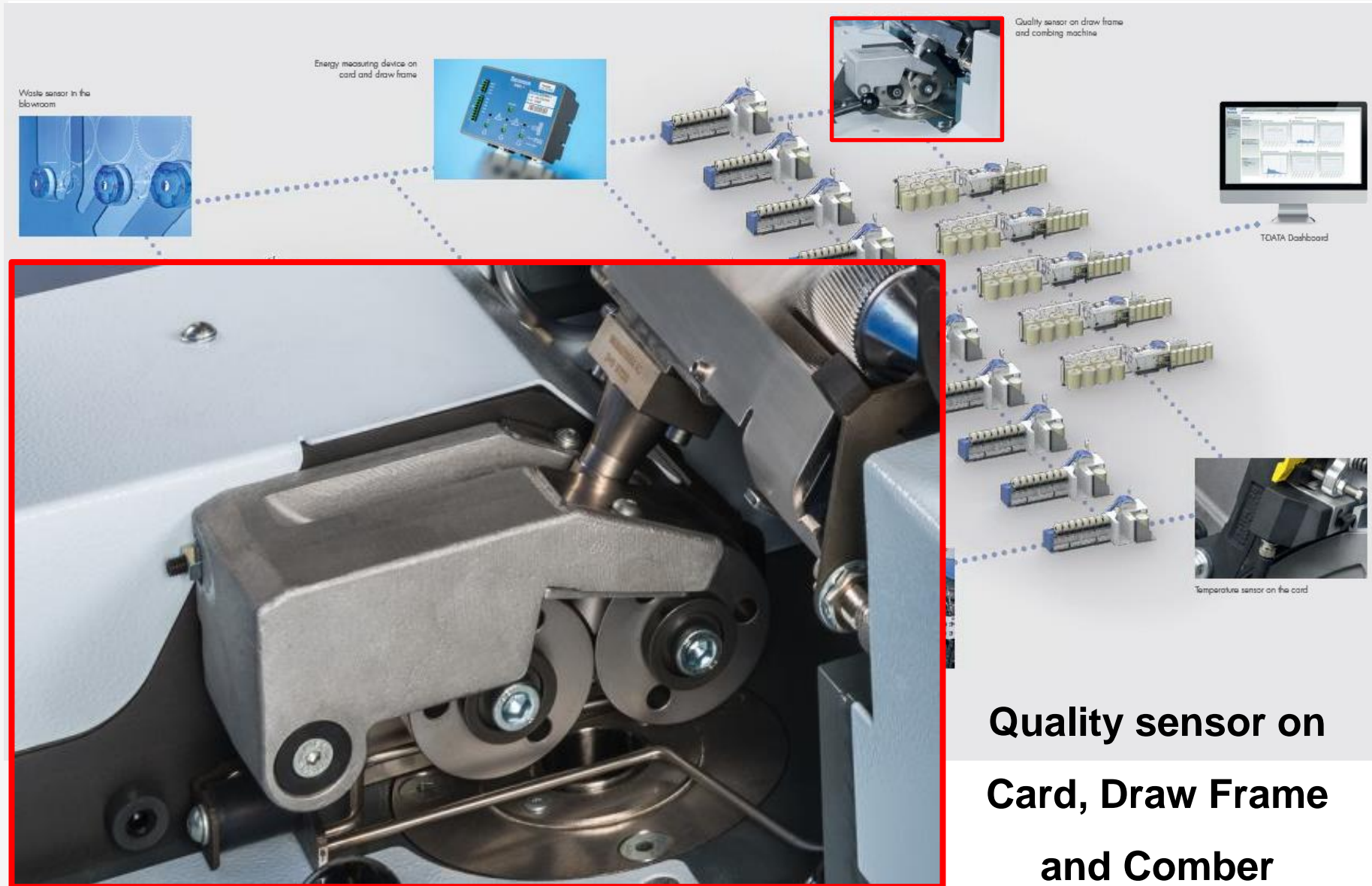


# High-end Sensor Technology “Made by Truetzschler”



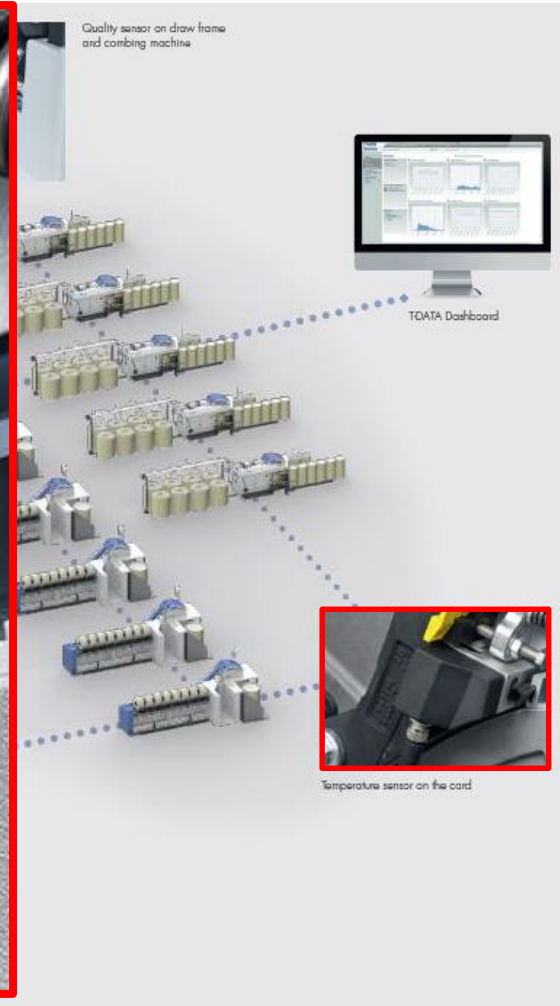
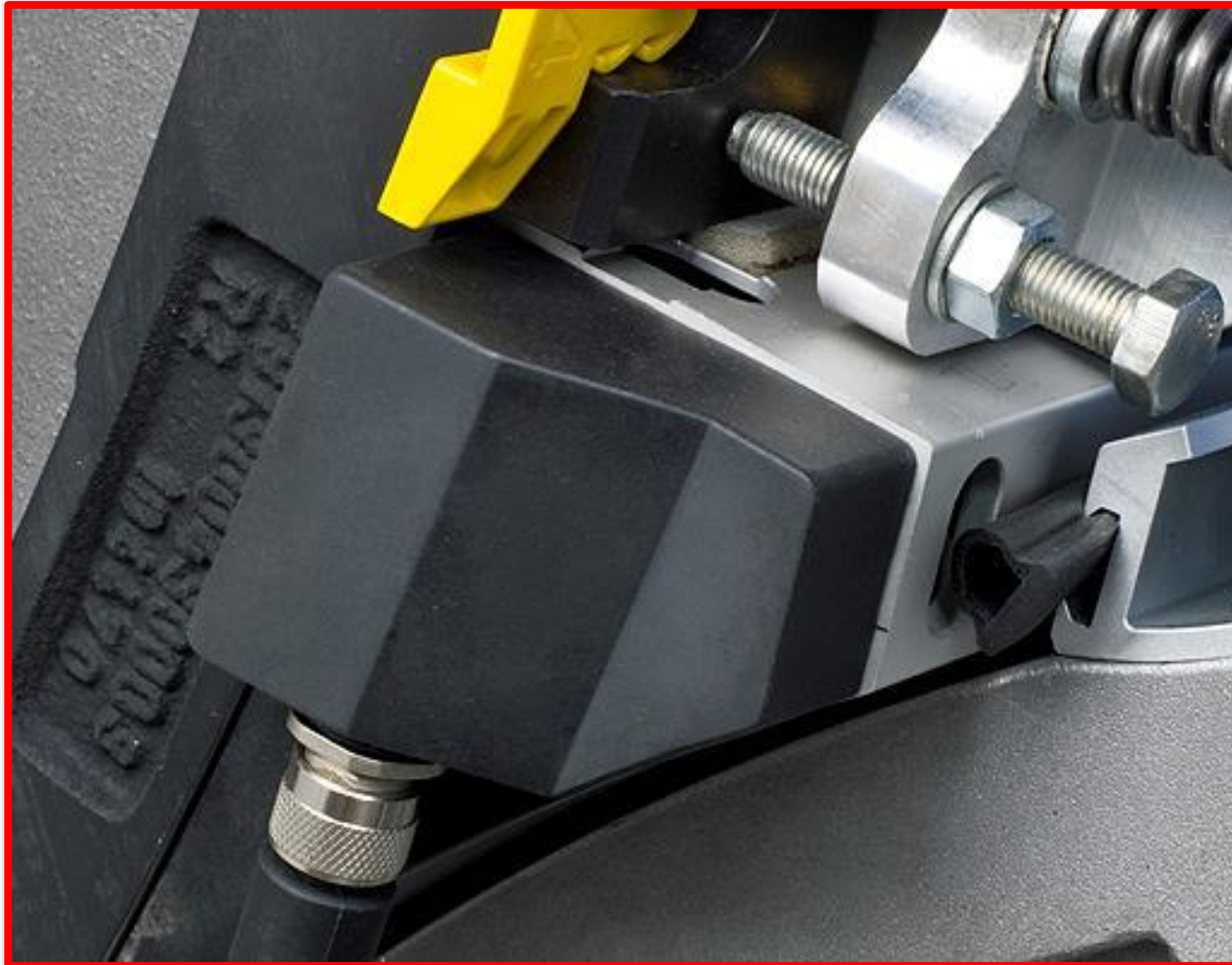
Energy measuring device on card and draw frame

# High-end Sensor Technology “Made by Truetzschler”





# High-end Sensor Technology “Made by Truetzschler”



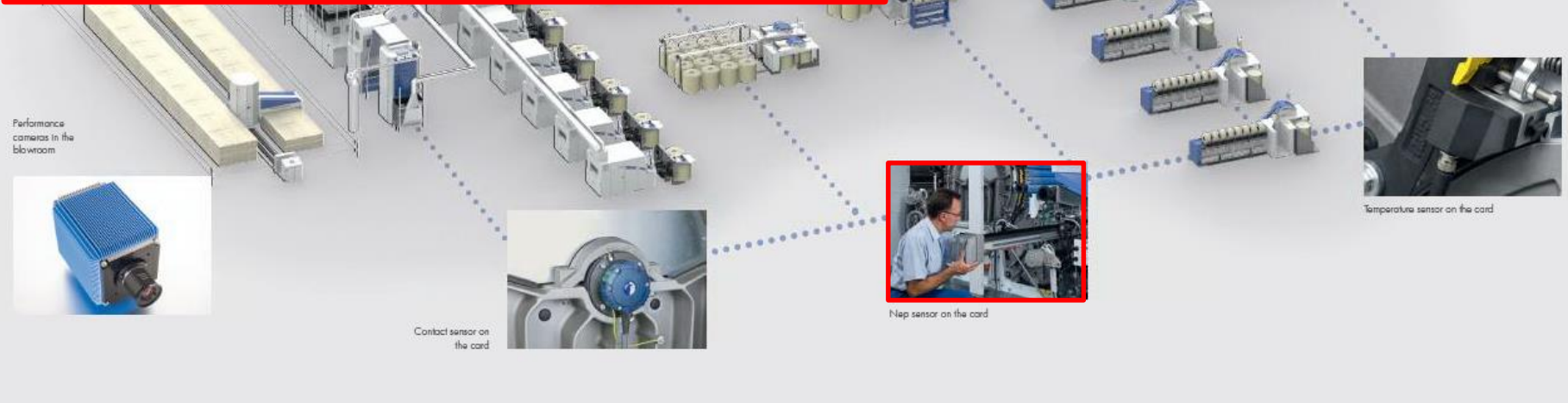
**Temperature sensor on the card**



# High-end Sensor Technology “Made by Truetzschler”

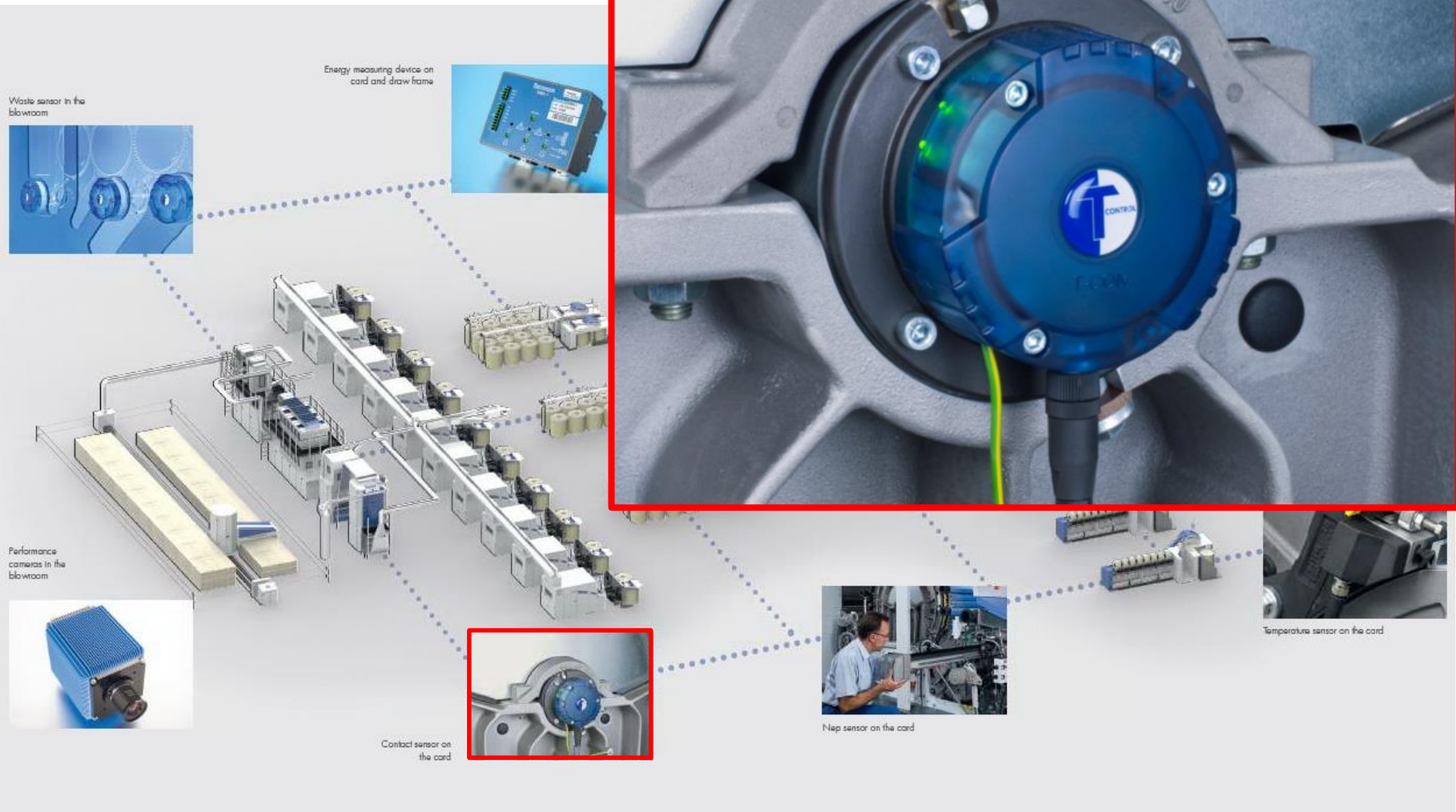


## Nep sensor on the card



# High-end Sensor Technology “Made by Truetzschler”

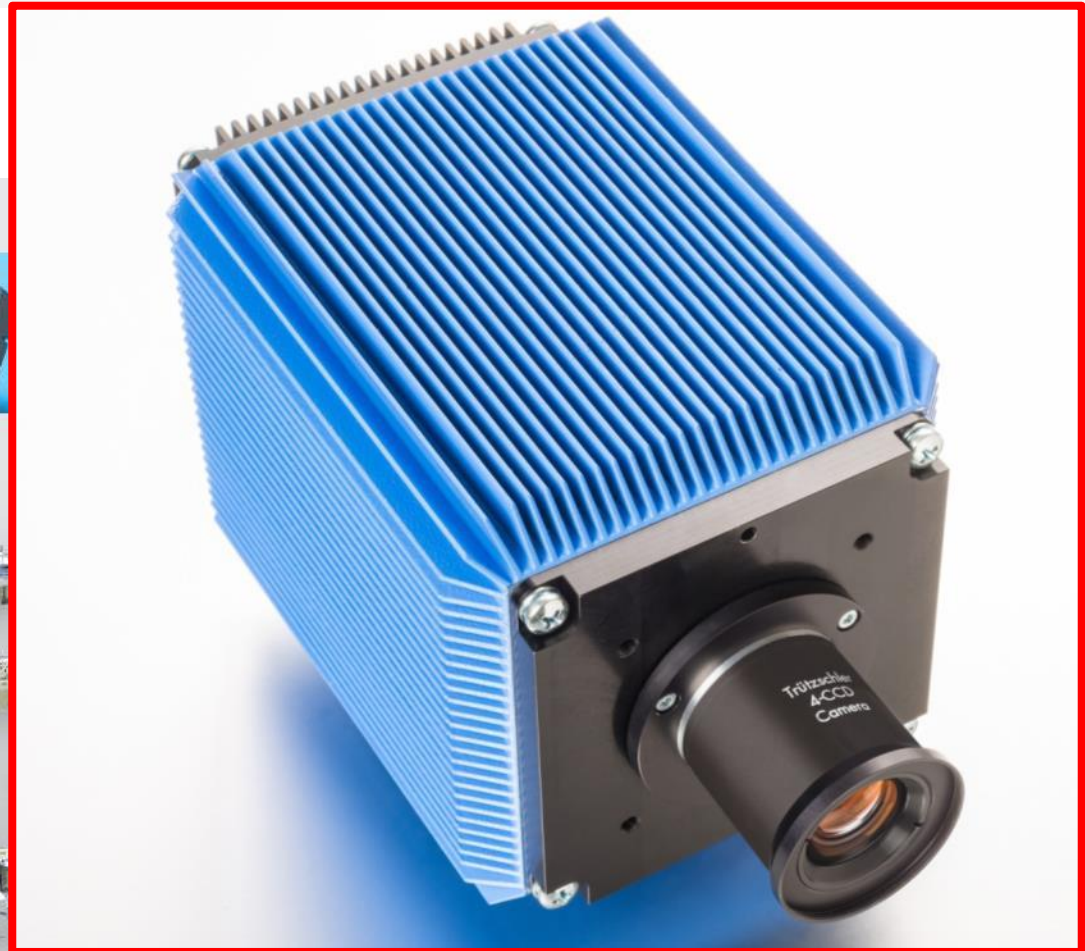
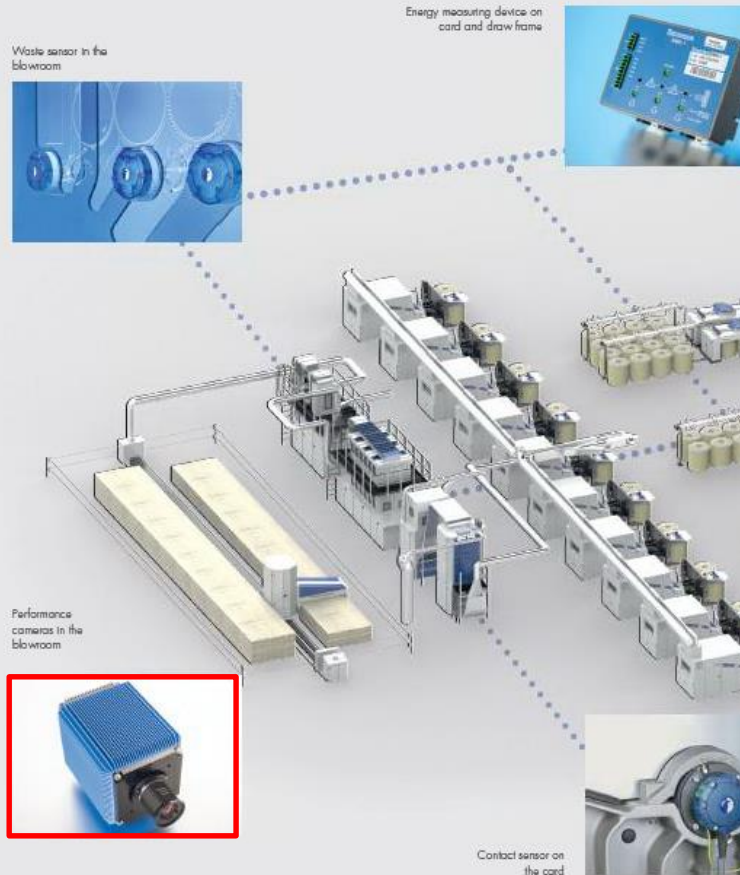
## Contact sensor on the card





# High-end Sensor Technology “Made by Truetzschler”

## T-SCAN Camera



Temperature sensor on the card



# My Production-App

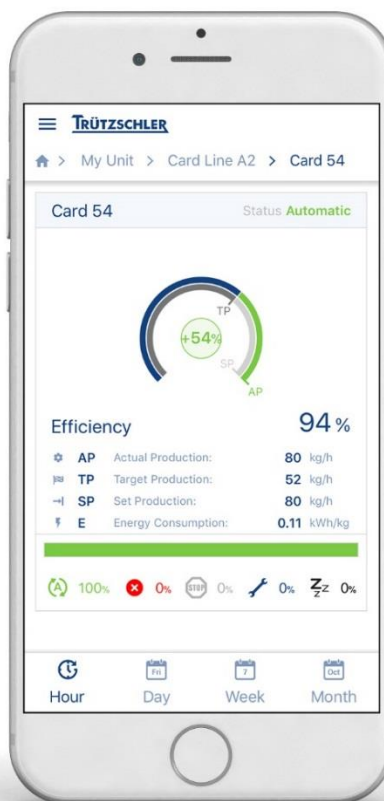
Production data  
in real time



Transparency across  
the entire spinning  
preparation



Simple and clear  
operation



Direct contact with  
person in charge

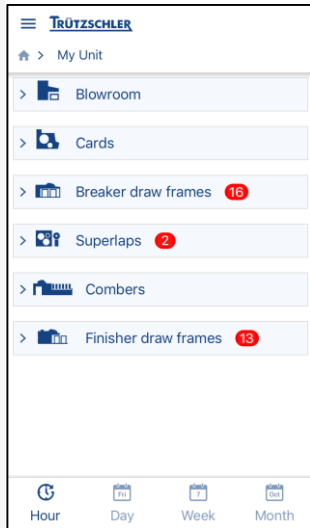


Insight, ranging from  
the unit to the individual  
machine

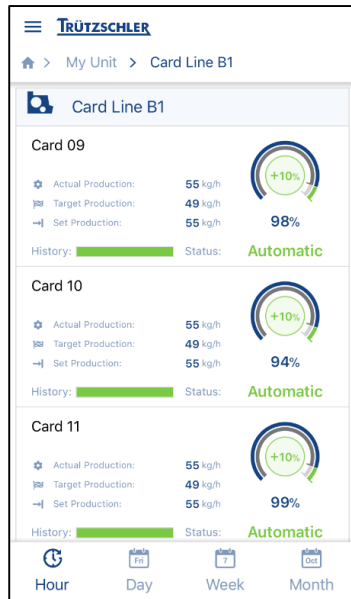


Secure, encrypted  
communication

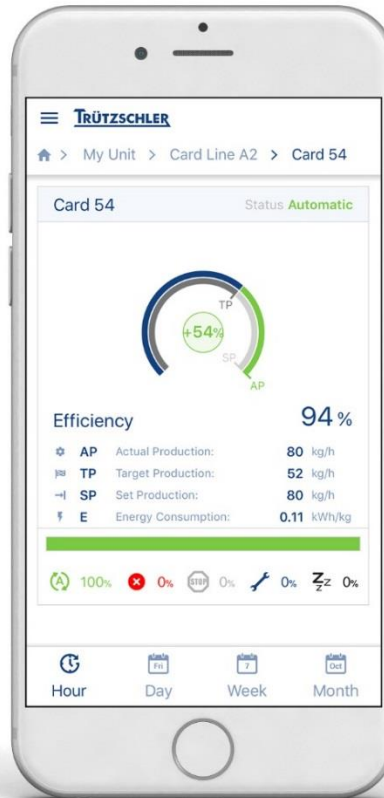
# My Production-App



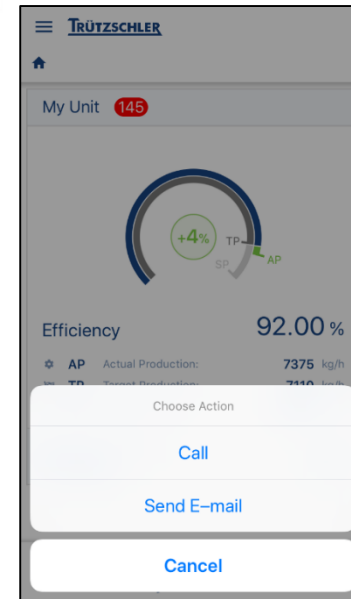
**Machine groups sorted by progress.**



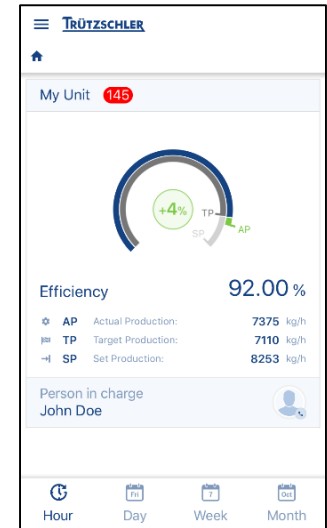
**Detailed information on each individual machine.**



**All machine data is updated in real time.**



**Direct contact with person in charge of production.**



**Summary of the production data at highest level.**

**it's true**

**it's truetzschler**



# Thank you very much for your kind attention



**SPINNING**



**NONWOVENS**



**MAN-MADE FIBERS**



**CARD CLOTHING**

[www.truetzschler.com](http://www.truetzschler.com)