

**SAURER.**

# Investment in the Textile Value Chain in Emerging Markets – a machine manufacturer's view

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Saurer Group



# 1 A short introduction to Saurer

# Saurer Group

## Over 170 years of innovation in textile industry

**Surrounded by Saurer** in everyday life, we are constantly surrounded by products and textiles made possible by various Saurer technologies: yarns and twisted yarns in fabrics as well as embroidered cloth.

**All applications, all fibres** over the years, Saurer has become a specialist in processing all kinds of short-staple fibres for the most diverse applications.

**Take five** ring, compact, worsted-ring, rotor and air spinning are all results of Saurer's customer-focused product innovation.

**E<sup>3</sup>: optimising energy, economics and ergonomics – adding intelligence**

with our customers' needs always top of mind, E<sup>3</sup> forms the basis of our design philosophy.

**Digital intelligence – Senses Mill** the Saurer mill management system allows customers to constantly analyse and monitor the productivity and the quality in their mills.

**Automation solutions** improving you material flow and reducing basic manual labour

**Future-proof** versatility in production as well as the upgradability of the machinery has become essential for future profitability.

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# 02 Adding value in the textile value chain

# Adding Value at Each Stage

From the presentation of Kanwar Usman at ICAC Plenum 2024



**Cotton**

\$ 1.80/kgs



**Spinning**

\$3.80/Kgs



**Weaving/Knitting**

\$5.20/Kgs



**Processing**

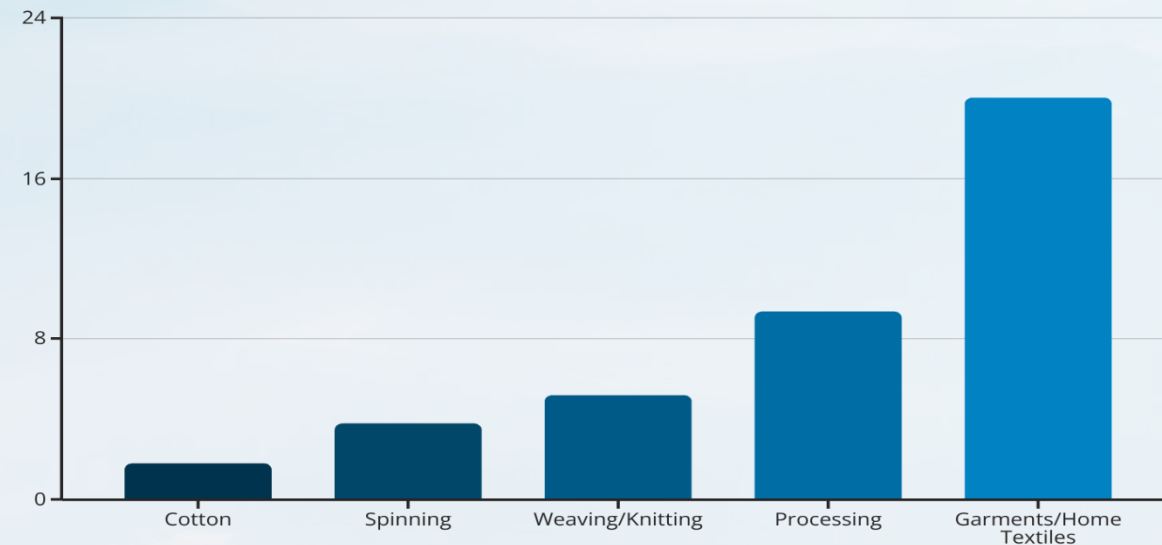
\$9.40/Kg



**Garments**

\$20/Kgs

**Value Addition in the Textiles Value Chain \$/Kg**



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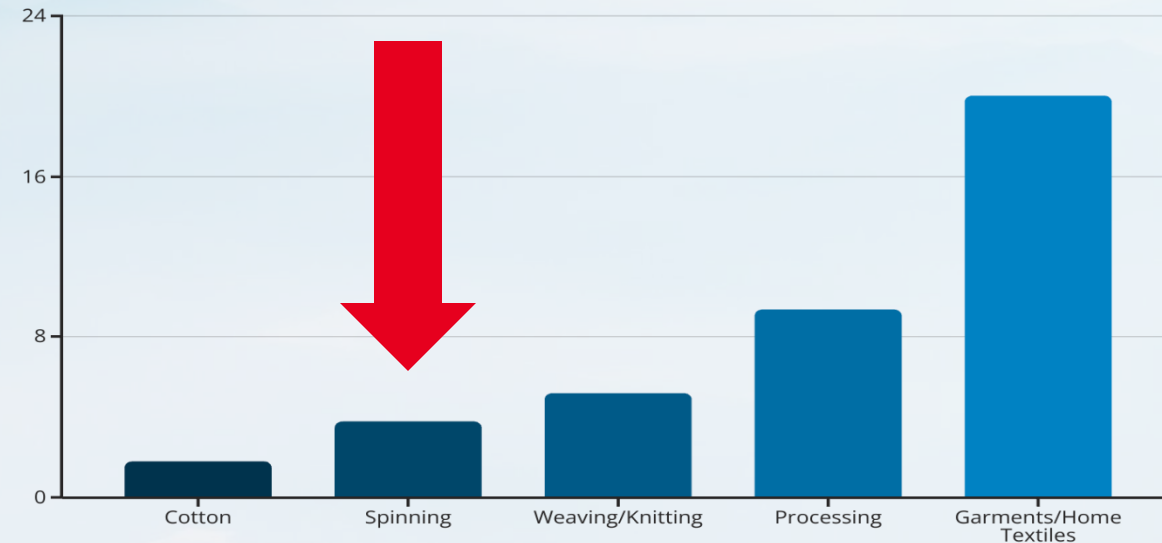
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# 3 Spinning staple fibres

# From Bale to yarn



**Choice of spinning application is dependent on required yarn properties, raw material properties, planned end-product and space / budget.**

**Ring and Compact spinning short staple fibres**



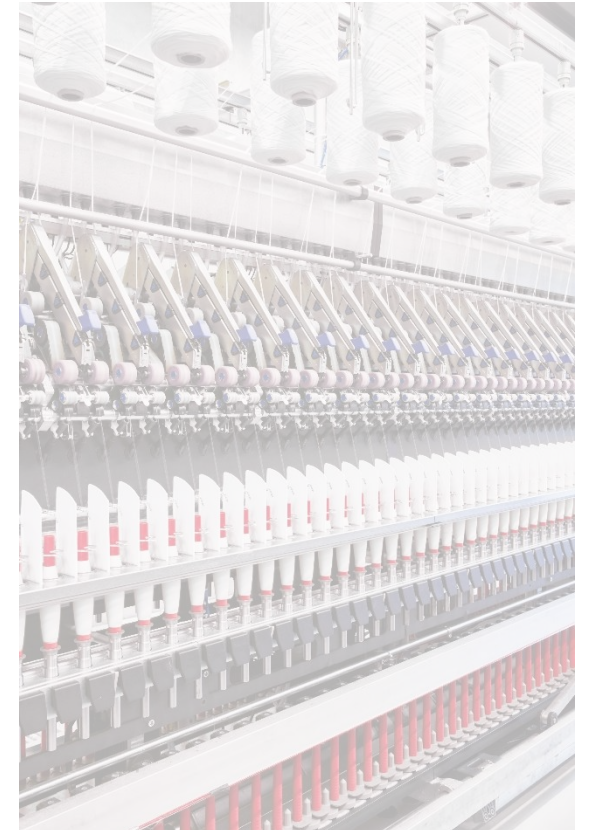
**Rotor spinning**



**Air Spinning**



**Worsted Ring Spinning for long staple fibres**

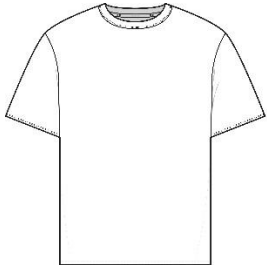


# A holiday shot with so many production possibilities



# A holiday shot with so many production possibilities

## T-shirt

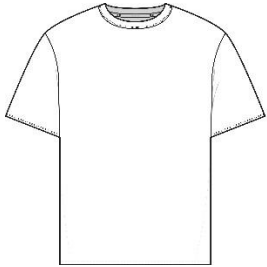


- Ring spun
- Rotor spun
- Air spun
  
- Cotton
- Polyester
- Viscose
- Blends
- Recycled fibres
- Elastane



# A holiday shot with so many production possibilities

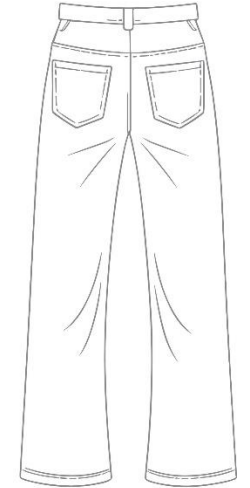
## T-shirt



- Ring spun
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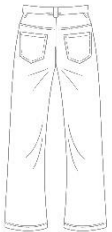
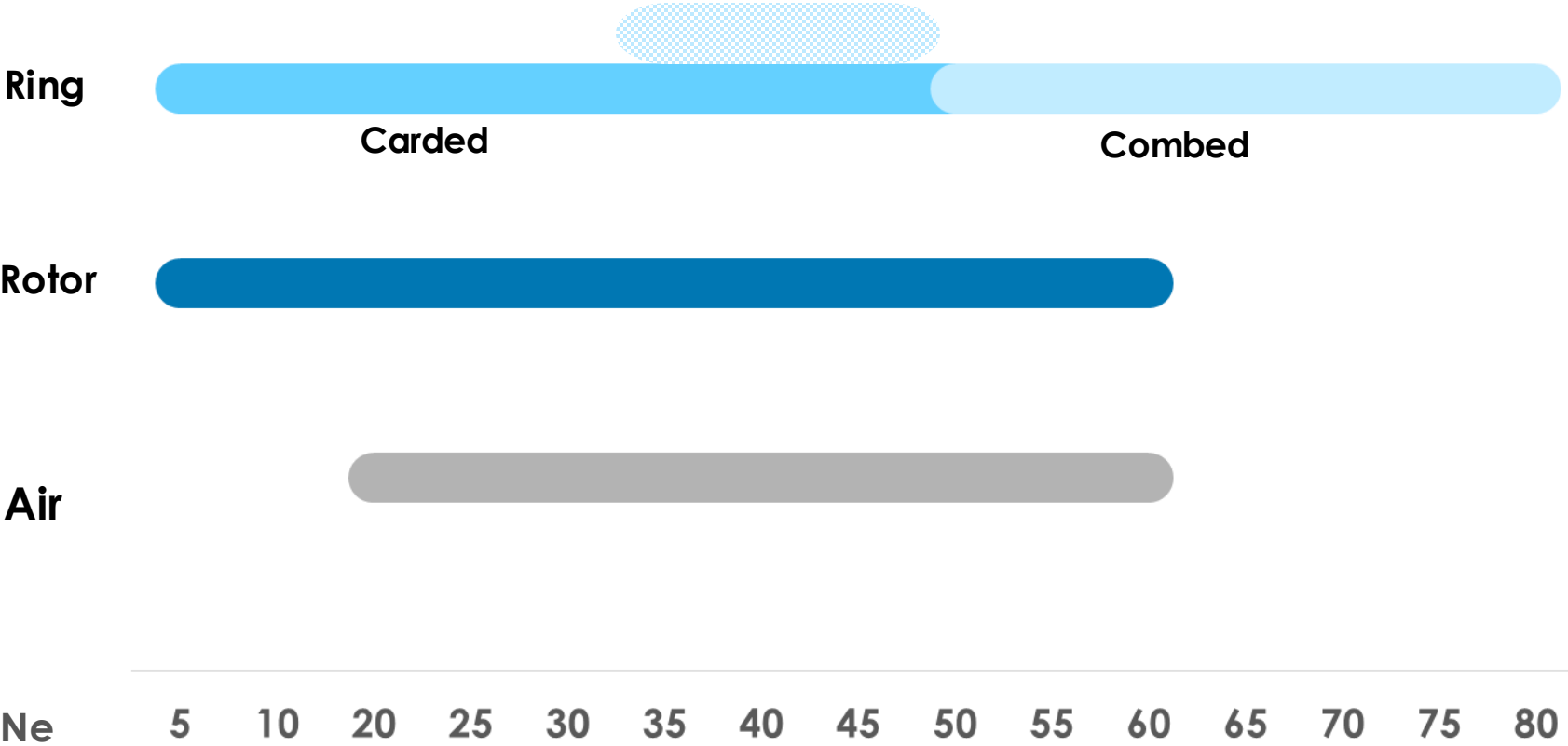


## Jeans



- Ring spun
- Rotor spun
  
- Cotton
- Polyester
- Blends
- Recycled fibres
- Elastane (ring)

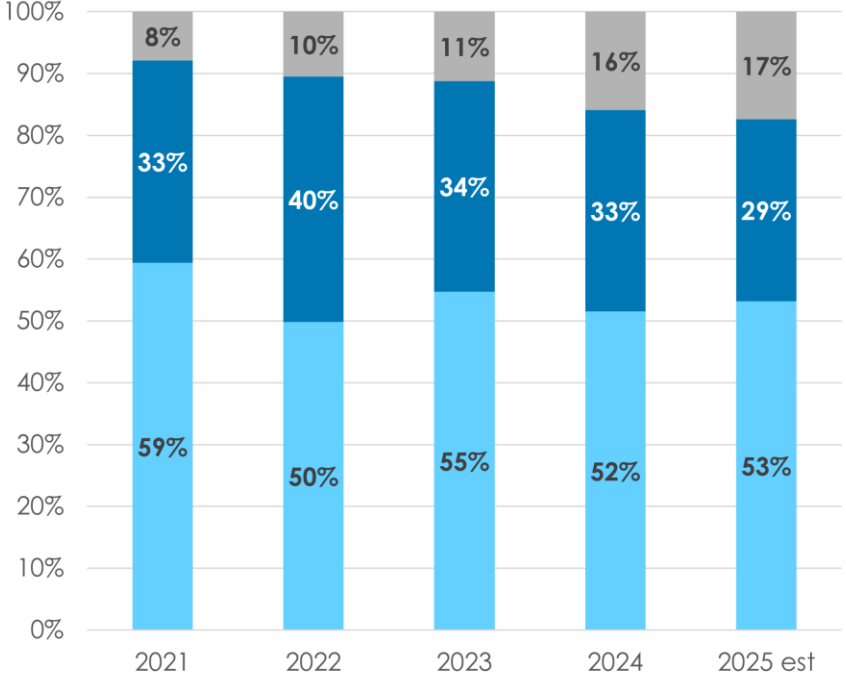
# Main yarn count ranges for the spinning applications



# Yarn and textile production is evolving; need for more energy efficient and flexible production but also the fashion changes the value chain

## Yarn producing applications

New installed machinery in ring equivalents; ring/rotor lose market share to air, but ring is still the dominant application

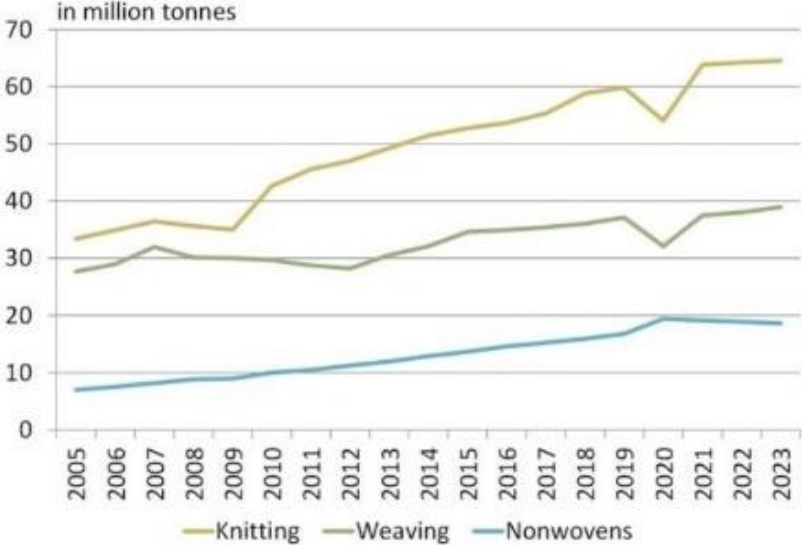


Source ITMF & Saurer est.

## Fabric producing applications

World Fabric Production 2006-2023 (Market shares unchanged since 2021: Knitting 53%, Weaving 32%)

World Fabrics Production



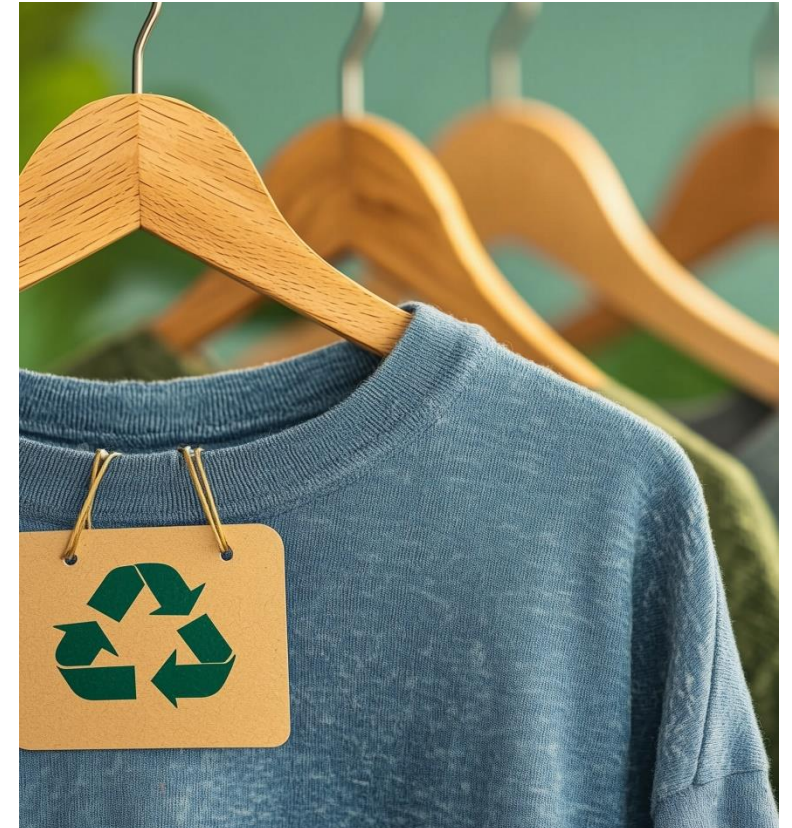
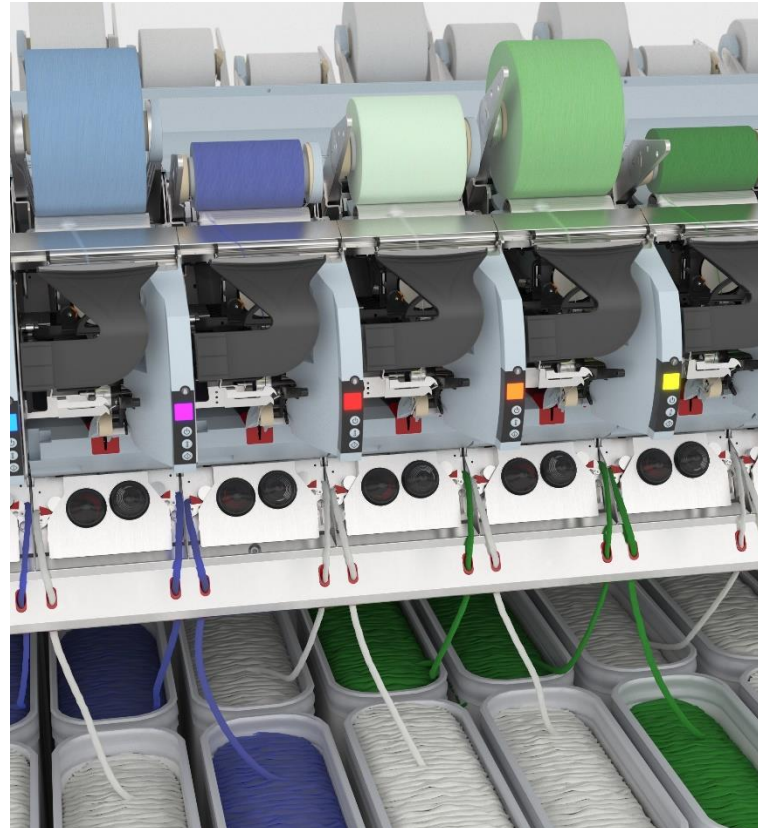
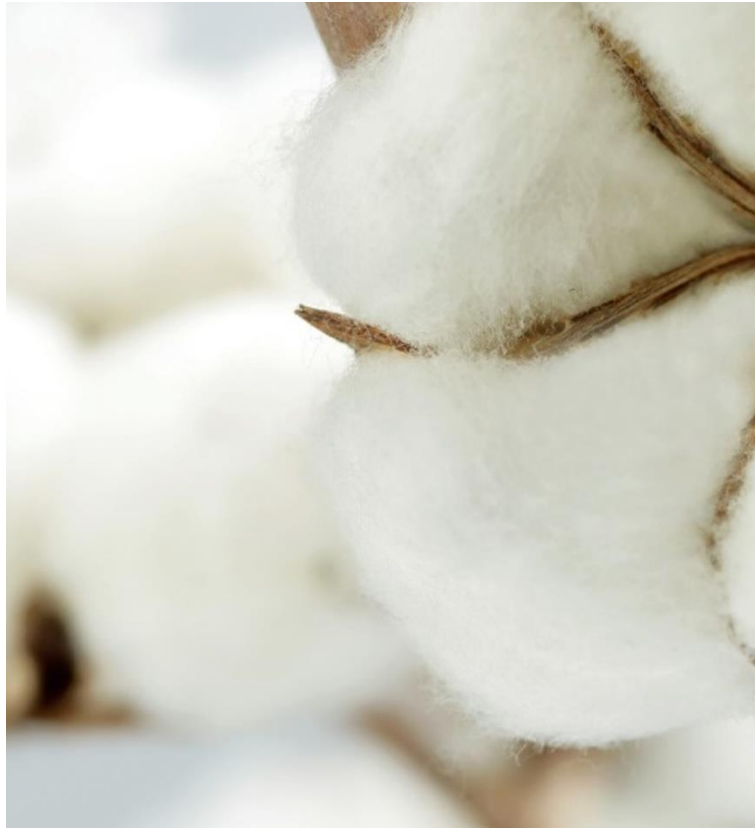
Source The Fibre/Fabric year

# Today's trends influencing the investments in spinning; the spinners and textile machinery manufacturers viewpoint

**Cost of resources & production; raw material, energy, initial investment for mill with building and aircon etc.**

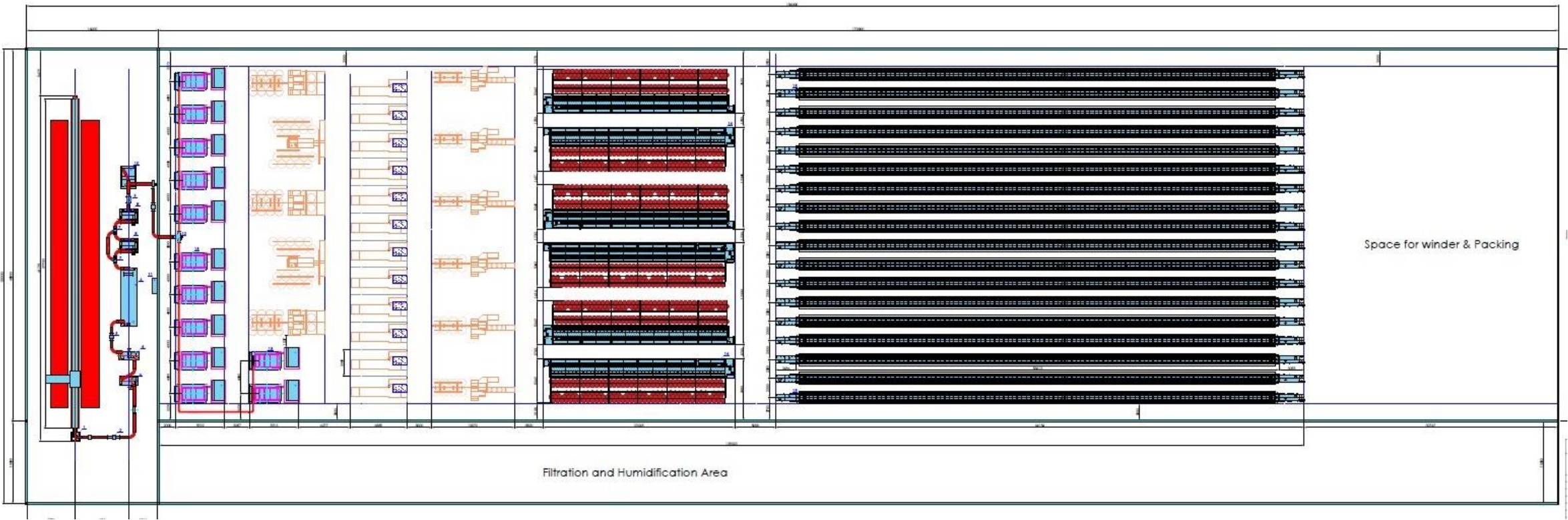
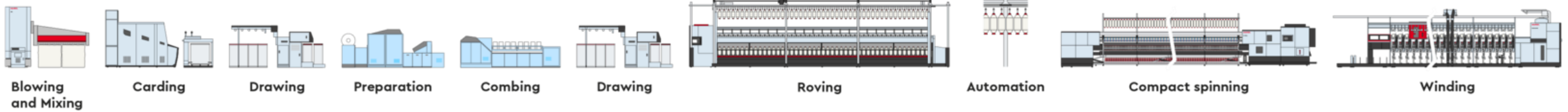
**Fashion needs flexible production; smaller lots, fast lot changes, high productivity**

**Circular economy requirements; including recycled fibres in the products, transparency**



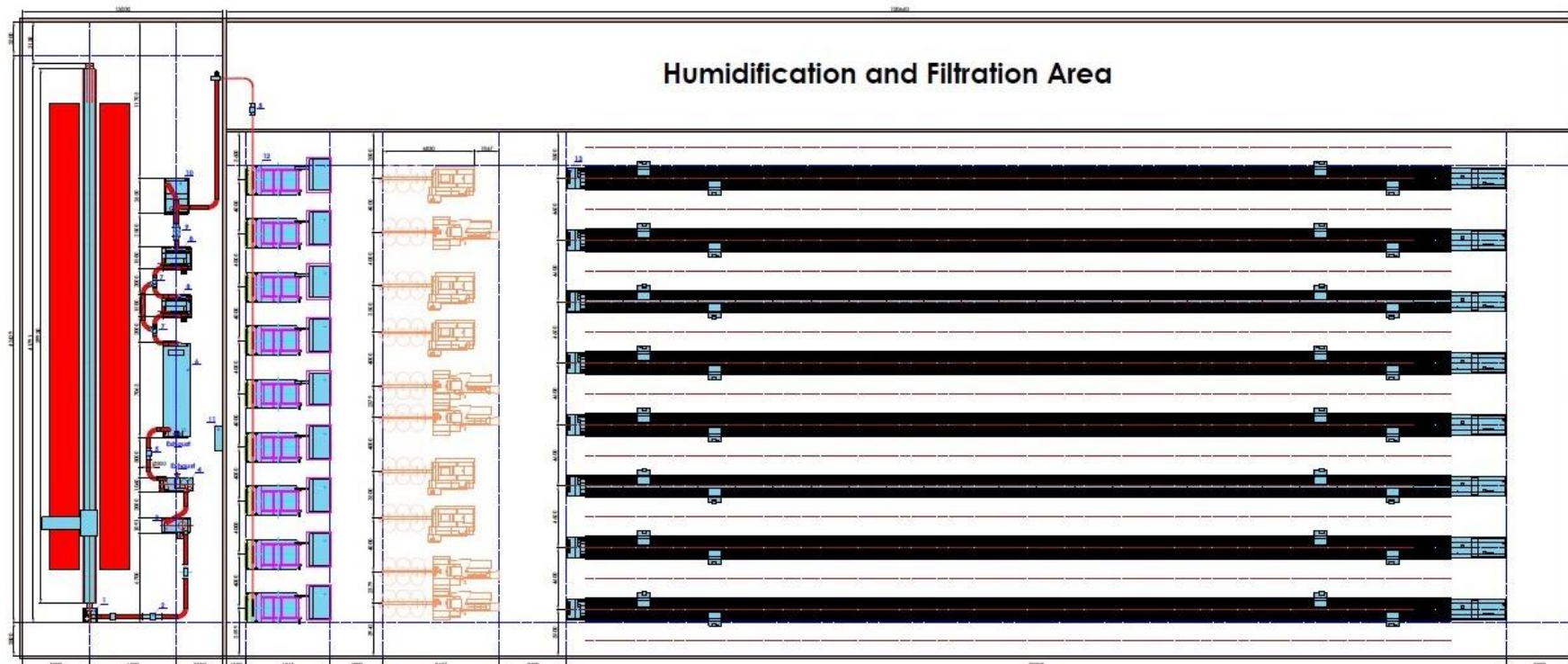
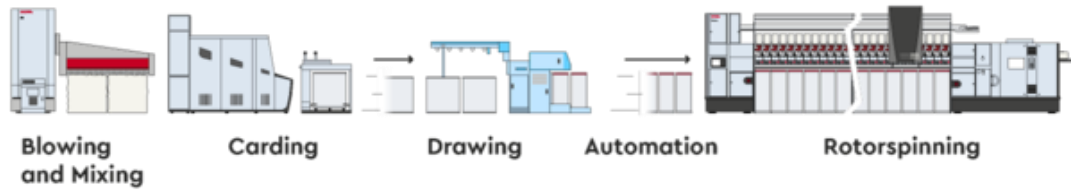
# Layout for ring spinning project ~ 800 kg/h (Ne30 combed cotton)

Space requirement ~10,000 sq. meter for 30.000 ring spinning spindles



# Layout for rotor spinning project ~ 800 kg/h (Ne30 carded cotton)

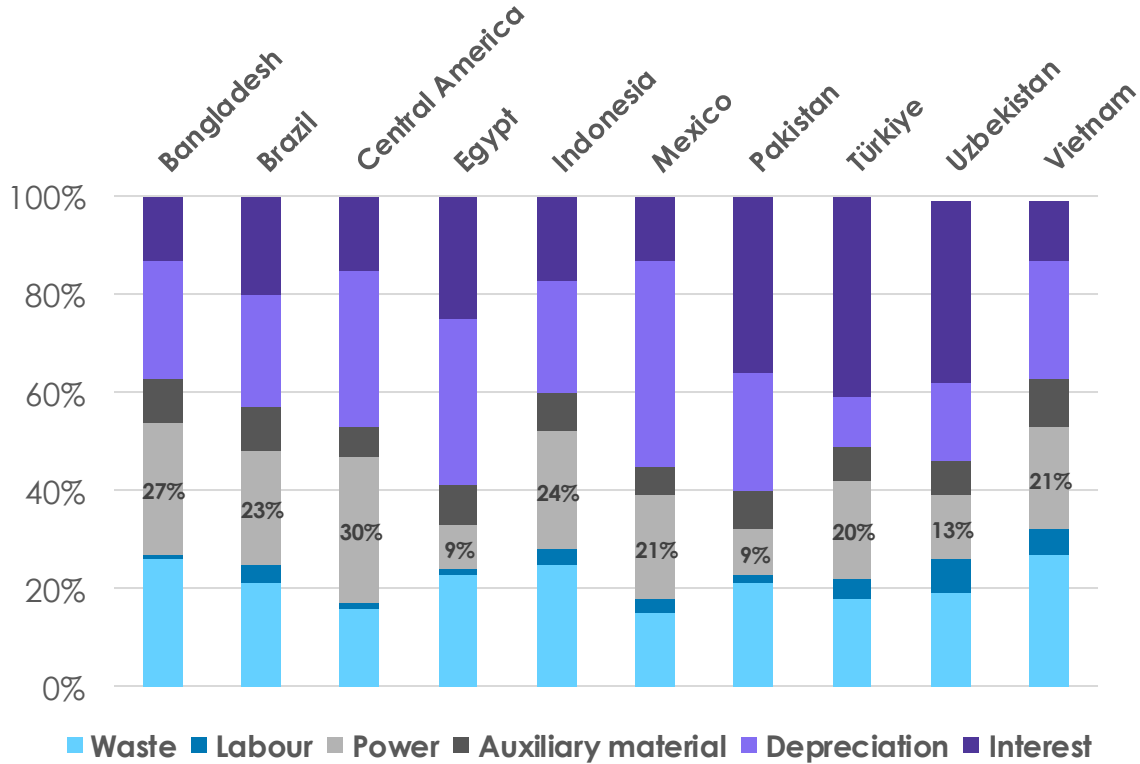
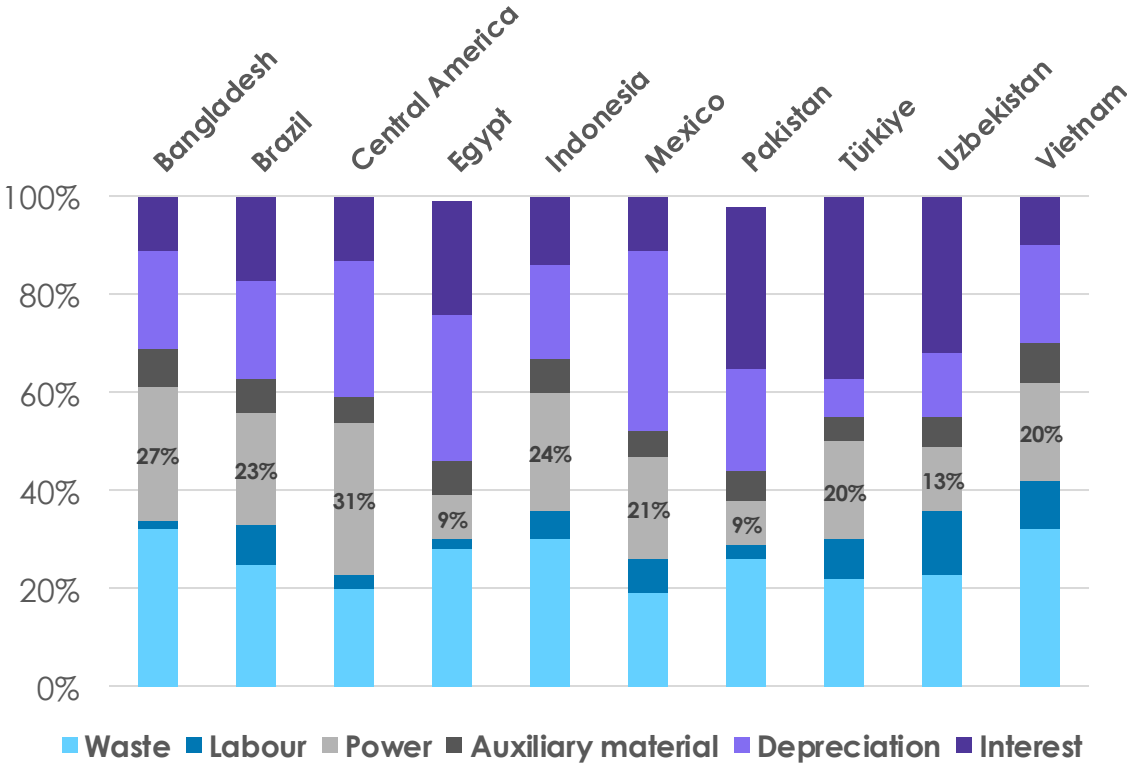
Space requirement ~ 5,600 sq. meter for 4500 rotor positions



**ITMF Production cost analysis: energy and interest are factors that can be changed to positively impact investment. Spinning needs space, energy and people. Waste can be influenced by spinning application.**

**Production cost ring spinning NE30**

**Production cost rotor spinning NE20**



Source: ITMF 2023 IPCC

# What has worked for our customers so far

- Energy availability, cost and support (i.e. gas in Bangladesh during growth era)
- Subsidies for interests (i.e. TUFs in India)
- Clusters for extended value chain (Uzbekistan push/pull incentives to develop the industry)
- Recycling to minimise waste (Ring/Rotor combinations or pure rotor mills)
- Energy efficient equipment (some countries are even banning import of second hand (old) equipment)
- Flexible production (enabling smaller lots, quicker lot changes etc.)



# Risks to consider

- Investing in a limited production unit (fashion changes so fast, successful mills stay flexible)
- Investing in low quality equipment (low initial invest can seem attractive but it is important to calculate lifetime cost)
- Service availability in the region (idle machinery is costly)
- Upgradable equipment for extend lifetime
- Machinery reaction time to power cuts (how fast is the machine up at full speed again)



# Thank you for your kind attention.

**Pia Terasa**  
**VP Marketing & Communications**

**Saurer Intelligent Technology AG**  
**Switzerland**

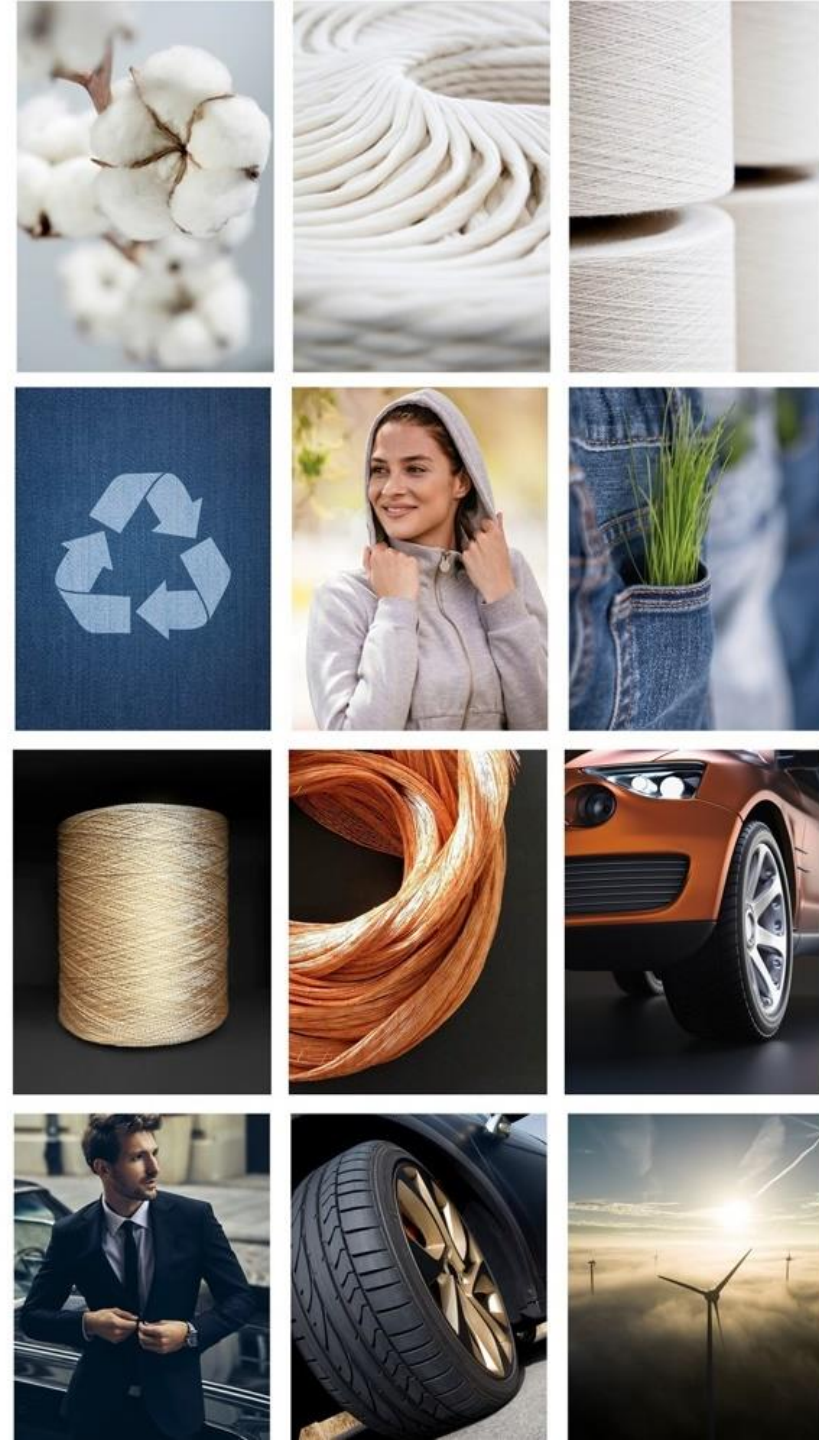
[pia.terasa@saurer.com](mailto:pia.terasa@saurer.com)

# Background information on Saurer

# Saurer – a leading machinery manufacturer for spinning and twisting machinery

- The Saurer Group, founded in 1853, is a leading, globally active technology company with a focus on machines, software, automation and components for yarn production
- With around 3300 employees and production and sales entities around the globe from Mexico to China, Saurer is in excellent position to cater to the world's textile centres.
- Saurer offers technologically advanced and customer-specific automated solutions for all staple fibres along with intelligent twisting and cabling machines for all kinds of yarns.
- The worldwide spinning customer produce yarns from finest cotton and wool to viscose, blends and the recycling fibres. Even some of the technical yarns today are ring-spun.
- Saurer twisting and cabling machines offer solutions for processing wool to carpet and tire cord and technical yarns to glass fibres.

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# Open-end spinning portfolio from bale to yarn

## Spinning preparation



Blowroom

## Air spinning Autoairo



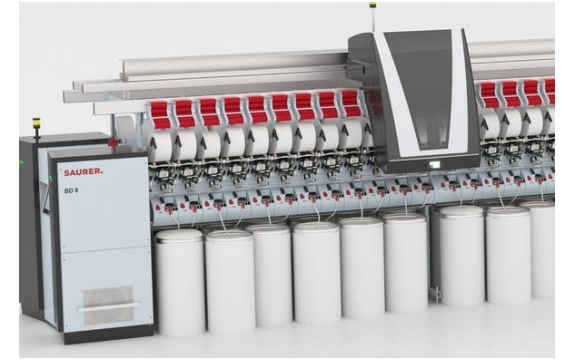
SynchroPiecing 24 and TurboStart

## Automatic rotor spinning Autocoro 11



Saves up to 10% on energy compared to Autocoro 10

## Semi automatic rotor spinning BD 8



Semi-automatic machine with intelligent automation options.



Cards for all applications



Double-sided machine concept offering MultiLot & PilotSpin



Recycling Xtreme for highest waste tolerance and productivity



Multilot 2 and optional doffer

# Ring spinning portfolio from bale to yarn for short staple fibres, worsted spinning machines

## Spinning preparation



Blowroom

## Roving, ring- and compact-spinning



Autospeed roving frames with automation

## Worsted Spinning for wool and acrylic



Zinser 451 worsted ring frame



Cards for all applications



Zinser 51 ring frames



Staple fibre twisting

# Twisting solutions for all kinds of yarns

**CompactTwister**  
for finest wool,  
home textiles and  
sewing threads



**CarpetTwister and  
CarpetCabler** for  
rugs and floorings



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**TechnoCorder  
TC2** for all kinds of  
technical yarns

**CableCorder CC5**  
for processing tire  
cord and other  
industrial yarns



**GlassTwister /  
CakeForming  
Winder** for twisting  
glass filament  
yarns for solar  
panels, mobile  
devices and  
circuit boards



# Saurer is a key enabler of the transformation; offering a full portfolio of machines for production of sustainable yarns already today

**Pre-Spinning:** flexible solution for recycled fibres in blowing/carding



**Rotor: BD Series** is the pioneer in recycling applications



**Autocoro:** the champion in fully automated recycling yarn spinning



**Autoairo:** the new class for spinning chemically recycled fibres



**Ring: Zinser 51** for ring-spun yarns from recycled fibres



**CompactTwister:** strenghtens yarn spun with recycled fibres



## Example machinery: Saurer Autocoro

- 10% less energy consumption to previous model  
(in total -36% energy saving reached in the last 15 years)
- Ramp-up in less than 5 minutes
- Simultaneously 6 different lots
- Extensive capability to handle even shortest fibres
- Three-chamber system for better sorting & reuse of fibres
- Synchropiecing 60



**Thank you for your kind attention.**