SAURER.

Powering creation

Clement Woon, Anton Kehl, Martin Küppers, Alexander Wenger

Barcelona, 21 June 2019

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1. Introduction
Clement Woon
Group CEO

We power creation

ITMA 2019 in Barcelona represents a new beginning for Saurer

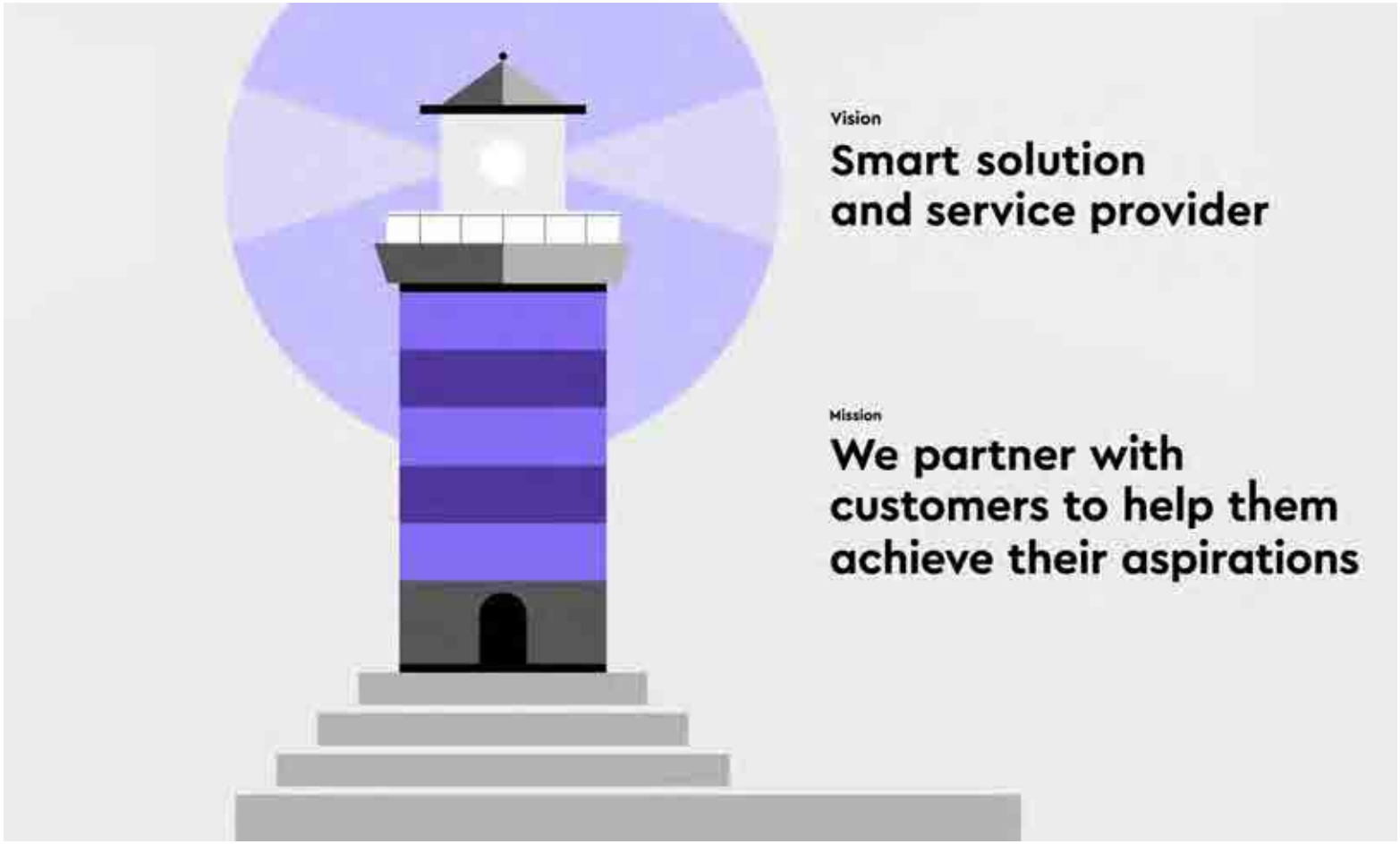
Strategy highlights

– Customer orientation
– Leading innovation
– Operational excellence

– E^3 complemented by intelligence

Successful year 2018

– Revenue: +3%
– Net profit: +12%



We power creation

Saurer's solutions offer endless possibilities

From **cosy**



to **functional**



We power creation

Benefits for our customers

- Fit-for-purpose solutions
- The only supplier globally offering all five staple fibre processing technologies, incl. ennoblement processes
  - ring
  - compact
  - worsted
  - rotor and
  - air spinning
  - twisting
  - embroidery
- State-of-the-art sensor technology, incl. data analysis
- Full integration of all machines in one mill management system



Growth values

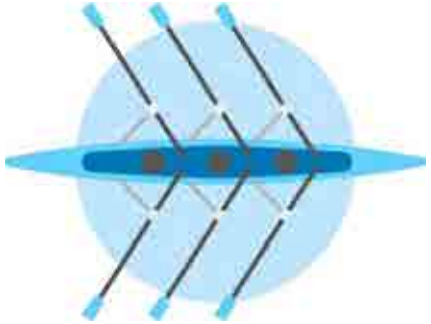


Put the customer first



Behave like entrepreneurs

Foundation values



Act as a team



Excel in quality



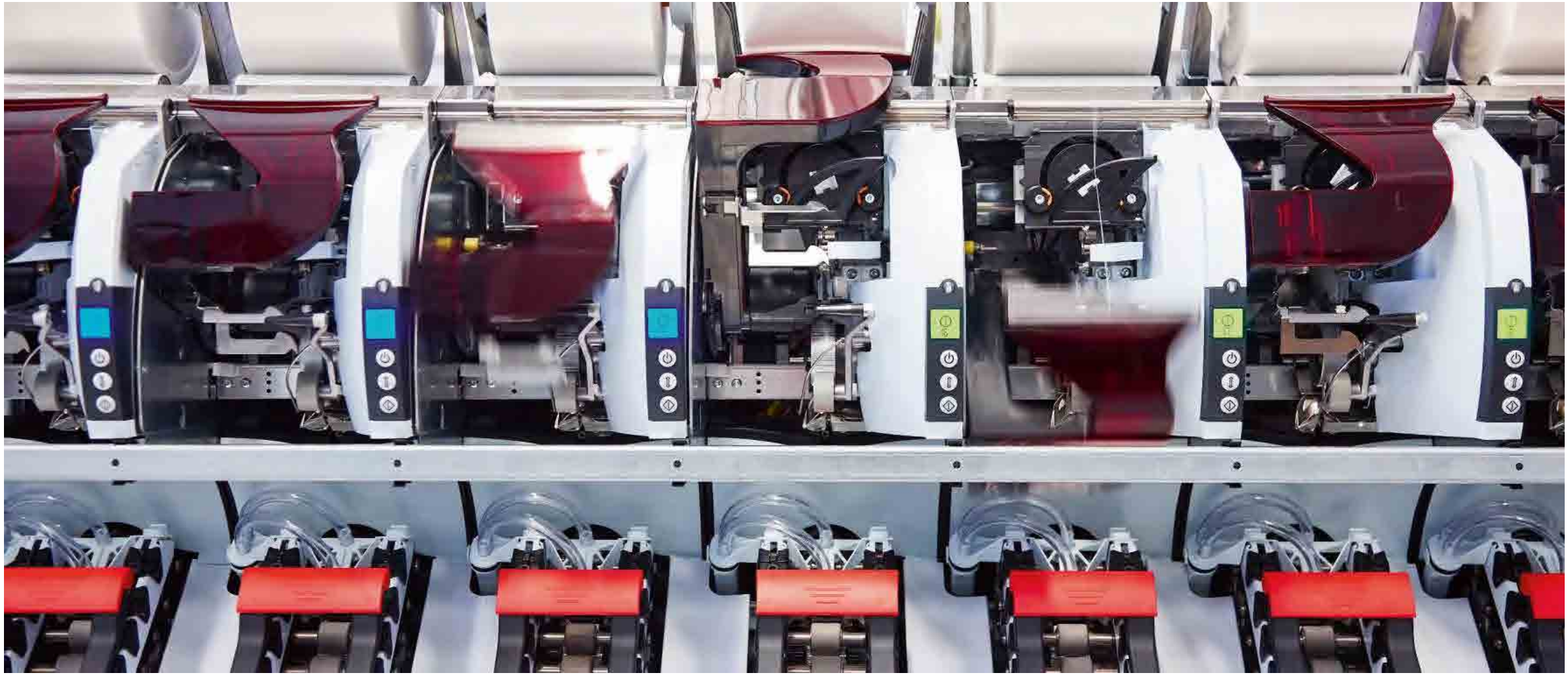
Deliver results

Value oriented.

2. Innovations
Anton Kehl
CTO & Segment CEO
Spinning Solutions

Move into new territory – Saurer's first air-spinning machine

Autoairo – progressive revolution in air spinning



Drive progress.

The importance of innovation for Saurer

Launch of Saurer Technology Centre

- Launch of new Saurer Technology Centre
- Business line Sensors focusing on sensorics, analytics and AI – paving the way for Industry 4.0 in textile industry
- Focus on automation along the value chain



Saurer – a solution provider

So much more than just a machinery supplier



We see solutions as so much more than just machinery

– Automation, digitization, service, training, consulting, project financing



Consequent extension of the value chain from bale to yarn package

– Full control of the fibre and yarn quality along the value chain

Closing the gaps in the spinning-preparation line

– Complete systems from one source including automation

– New Saurer Autodraw double-head draw frame

– Innovative new Autocard with higher productivity and MTA-option



We are experts in spinning

Process focus on customers end products

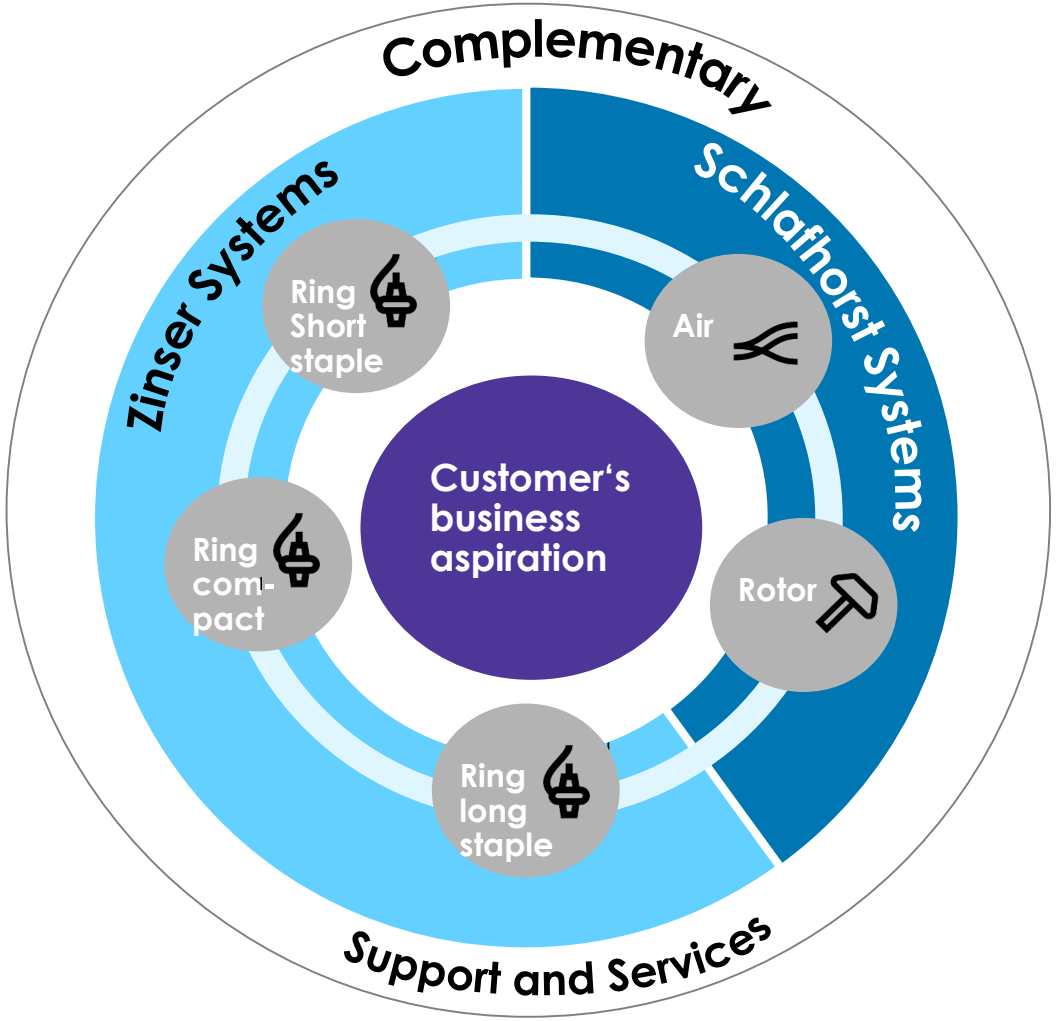
The circle of five

Saurer's spinning applications:

– ring
– compact
– worsted ring
– rotor
– air.

Our products deliver optimised energy consumption, economics and ergonomics (E^3), with a focus on intelligence.

Our products are: flexible, smart and connected.



What is new at Spinning Solutions besides Autoairo?

A lot

Saurer is a solution provider



– New **pre**-spinning portfolio
– Versatility in **rotor** spinning
– All new air spinning
– Modular **ring**-spinning portfolio with intelligent **winding**
– **Automation** on all levels

Mill management and laboratory



– **Senses** – connects all Saurer products, allows 3rd-party integration
– **Autolab** textile laboratory

We keep an eye on details



– **Spinnfinity** – new energy-saving and dust-resistant zero underwinding
– Individual spinning monitoring **(ISM)** on ZI 72 XL
– **SmartSplicer** – new, result improving splice technology
– Autocard option **MTA**

3. Saurer Spinning Solutions
Martin Küppers
Head of Sales & Service

Sales & Service organisation

We are there for our customers, and we are where they are

Regional set up – we are where our customers are

– Sales and service directly in the regions, close to the customers and easy to reach
– Textile laboratories and technologists as well as showrooms in the regions
– Customer service centres in almost 20 countries around the world

Baumeister concept: One project manager for every larger delivery site

Consulting: Deep dive together with customer to find the best solution to current challenges

We are closer to our customers – 24/7

– Our training centres are located in all 4 regions and now online training is available 24/7

What about our services?

Sustainability in the machinery is a part of the whole sustainability process

Consulting you all the way



– Consulting by our after-sales team to find best solution for customers. It may turn out to be parts, training for the staff, a machine or a new mill.
– Our textile technologists offer advice on settings for existing production as well as news on trends (new materials, etc.) for new investments.

Parts and services



– Sun – Service unlimited is keeping you competitive throughout machine lifetime

– Original parts, predictive maintenance and health checks ensure constant high productivity

Secos and Academy



– Secos – customer portal including an online shop with added value.

– Saurer Academy is introducing a new way to train customers' teams where and whenever. Online. Digital.

4. Saurer Technologies
Alexander Wenger
GM Twisting Solutions

Innovations by Saurer Technologies

Twisting – new machines

Tire – CableCorder CC5



– New technology for savings in energy and workspace
– Increase in production speed
– New quality sensor and intelligent software solutions
– New technology for human-machine interaction
– Future-oriented data communication by Senses

Carpet – CarpetCabler 1.10



– Enhanced electro concept
– New terminal and software
– Switchable pre-take-up roller, open design
– Integration of parameters into lot recipe
– Data management, full integration by Senses
– Optional yarn quality sensor

Staple – CompactTwister



– Servo drive concept
– Data management, full integration by Senses
– Optional yarn quality sensor
– Saurer overhead cleaner

Innovations by Saurer Technologies

Twisting – transport automation FlexFlow

CreelFlow



– The CreelFlow system replaces the conventional creel and delivers packages precisely to the winding positions for an entire machine side
– The packages are directly transported into the Twister by means of trolley trains

Lifter and PackFlow



– The finished packages are lifted from the machine's conveyor belt and transferred to the PackFlow without damaging the strand
– PackFlow transports the finished packages via the FlexFlow rail system for further processing

PackDrive (AGV)



– Automatic detection of obstacles
– Flexible application possibilities
– Optimised handling for easy use by operators
– Fully automatic clearing of packages
– Flexible use of several PackDrives

Innovations by Saurer Technologies

Embroidery – solution provider

Epoca 7



Setting new standards

– Productivity increase of up to 25%

– Energy usage 5% lower

– 18% increased speed

Automatic Rear Carriage



– Reduces the machine setting time and yarn breaks

– Automatically adjusts settings in reference to the yarn properties

CleanGuard



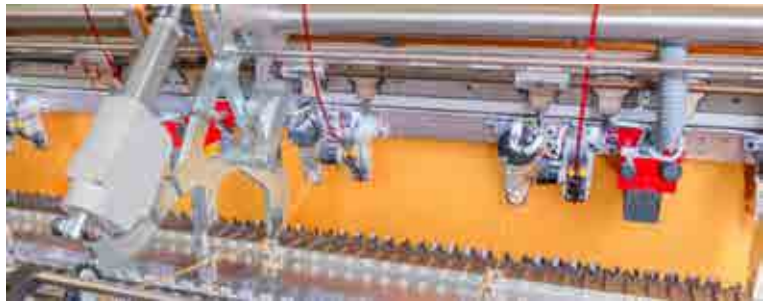
– Cleaner for flying cotton dust

– Increased life of wear-and-tear parts

Innovations by Saurer Technologies

Embroidery – solution provider

HeadLine



Boundaries of embroidery applications and designs redefined

– SoutacheHead

– SequinsHead

– LaserHead

EmStudio



Modernised CAD/CAM platform

– Design workflow from sketch to production on a single platform (drawing, punching, visualisation)

– Product optimisation and productivity analysis

Senses



Innovative mill management system

– Collects and analyses production, quality and machine data

– More transparent and optimised production processes

– Enhances efficiency and increases profitability

Innovations by Saurer Technologies

Elastomer components – polymeric solutions

Accotex J-468



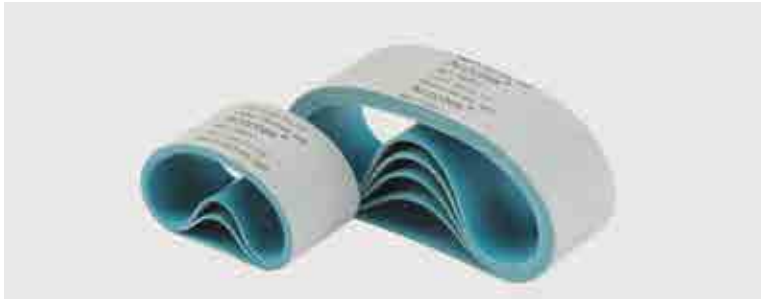
– Ring-spinning cot
– Cotton (Ne12) and synthetic fibres (Ne20) from coarse to fine yarns
– Hardness of 68 Shore A
– Closes the gap within the product portfolio from 60 to 80 Shore A hardness

Accotex Q-964



– Compact- and ring-spinning cot
– First soft cot for synthetics, synthetic blends, dyed fibres
– No count limit
– Excellent fibre guidance
– Outstanding dynamical properties

Accotex NO-79201



– Universal – for all spinning machines, fibre types and the whole yarn count range

Innovations by Saurer Technologies

Engineered bearing solutions

Temco CoolFlow discs



- Improved heat transfer
- Lateral grinding for higher precision
- Longer life-time of the disc
- More stable yarn quality
- Reduced swelling sensitivity
- Improved resistance against spin finish

Temco in-view bearing monitoring system



- Constant condition monitoring of every single ball bearing
- Predictive maintenance, based on the real load situation
- Intelligent system (with sensor-equipped bearings)
- Offers a clear understanding of the bearing status in real time
- Immediate identification of positions with possible defects
- Trackable from various output devices (smartphones, tablets, machine panels)

Innovations by Saurer Technologies

Fibrevision – online monitoring

Creel monitor system

Quality monitoring in the DTY process, including POY material.

USP's

– Production of knot/splice free packages
– Ability to track POY packages
– Fits both gate and rotary creels

Customer benefits

– Cost effective
– No operator intervention
– System can be used as part of Industry 4.0 data analysis
– Integration on any machine or as stand-alone system



5. Saurer's anniversaries – celebrate with us

Market insights

Renowned experts will be speaking

20 June

– 11:30-12:30: Mr Stephan Baz, DITF Denkendorf

– 16:00-17:00: Mr Klaus Steger, Südwolle Group

21 June

– 11:30-12:30: Prof. Thomas Weide, Hochschule Niederrhein, Mönchengladbach

– 16:00-17:00: Mr Kapil Agrawal, Birla Group

22 June

– 11:30-12:30: Mr Thomas Fröis, CEO of Textible and winner of the Futurezone Awards 2017

– 16:00-17:00: Dr Uwe Möhring, Managing Director of TITV Greiz

25 June

– 11:30-12:30: Mr Daniel Bücher, ITA, RWTH Aachen

– 16:00-17:00: Dr Walter Arne, Fraunhofer ITWM, Kaiserslautern, and Erik Bell, ITA, RWTH Aachen

Please consult our new website for more information

