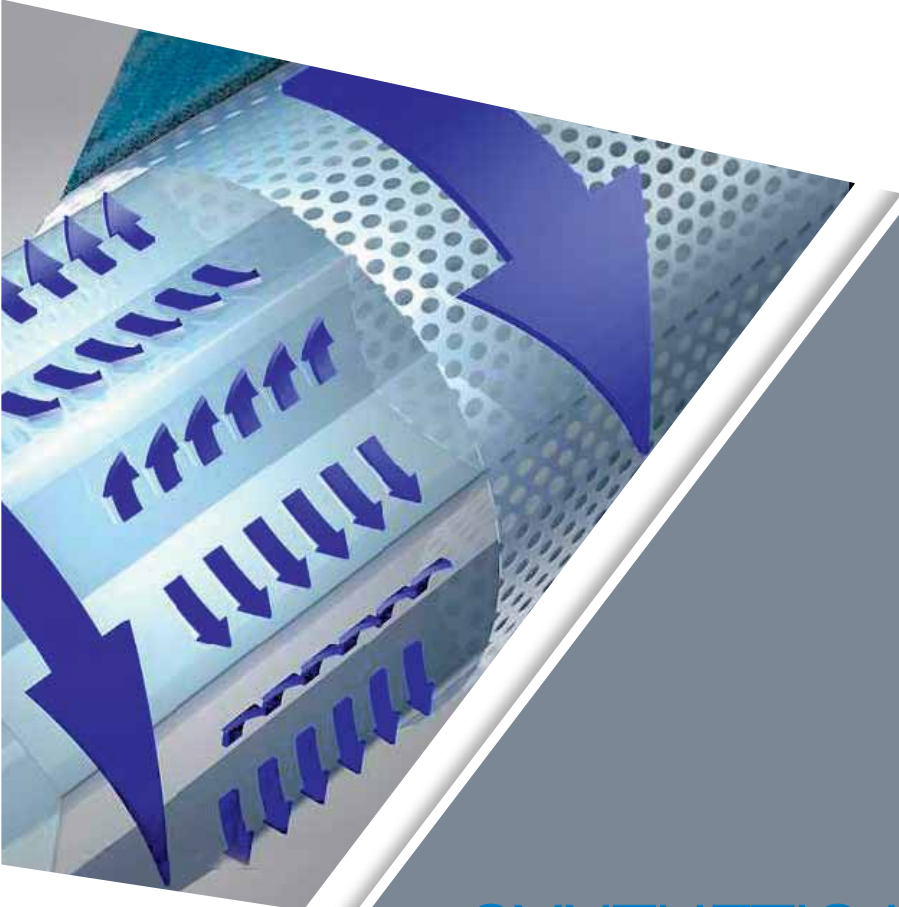




SYNTHETIC KNITTED FABRIC

GENTLENESS AND CONSISTENCY -
LOW-TENSION TREATMENT MEETS VERSATILITY







COMPANY INTRODUCTION



German Engineering
Innovation Since 1948

Goller was founded by Fritz Goller in Schwarzenbach, Germany in 1899. Since 1948, Goller has been designing, researching and developing, manufacturing and supplying wet finishing ranges to the global market and Goller is one of the major suppliers in the wet finishing sector. In 2006, Goller has become one of the members of CHTC Fong's and its production capability and market share have been kept increasing since then.

With the combination of distinctively-advanced German technology and human-based managed production complex in Germany and China, Goller offers a wide range of meticulously-designed and highly-effective and efficient wet finishing range for woven fabrics and knitted fabrics processing that covers everything from desizing/spun oil washing to the final stage of washing. Goller's wet finishing ranges enable users to have minimum level of power consuming and optimum level of reproducibility assuring production processes and they have flexibly been tailor-made to meet the specific requirements of each user.





COMPREHENSIVE SERVICES-ORIENTED

As a reliable and quality-conscious supplier of wet finishing range, Goller is not only focusing on technological advancement but also highly committed to providing professional, efficient and reliable services to all of our users, ranging from expert advice on the specification and configuration of the range, proficient range commissioning service, on-site and on-line troubleshooting to timely supply of spare parts.



RESEARCH AND DEVELOPMENT

Goller owns its Research and Development Centre in Germany and China. Goller is dedicated to the sustainable research and development to wet finishing technology and the integration of innovative design and features into Goller's ranges so as to keep pace with the ever-changing needs of users or even exceed the expectations of users.

Thanks to the long-term established relationships with Textile Machinery Associations, renowned chemical suppliers and research institutions and the intensive communication between Goller and the users, Goller is competent in developing the pioneering technology of wet finishing ranges.

ADVANTAGES

GENTLENESS AND CONSISTENCY - LOW-TENSION TREATMENT MEETS VERSATILITY

GOLLER SINTENSA PLUS is a specialised-designed and one-for-all wet finishing solution. It can be applied for technical textile or lingerie processing. It has been famed for its high degree of reproducibility, reliability, productivity and durability.



Gentle

GOLLER SINTENSA PLUS processes the light and delicate fabrics in fine yarn counts and gauges with care – pushing the fabric's limits further. Knitted fabrics and woven fabrics ranging from low to medium weight and any fibre or blend can be processed.



Flexible

GOLLER SINTENSA PLUS has been designed to meet standard requirements of users regardless of knitted, woven or elastic fabrics. One system can be applied for different wet finishing applications. Configurations and specifications of any range can be tailored-made to fulfil the specific requirements of users.



Reliable

A well combination of meticulous designed, high quality spare parts and precise craftsmanship makes Goller's range to be a reliable partner for users in wet finishing sector.



User-friendly

GOLLER MULTIDATA is a one-stop platform for range's operation and maintenance and enables Goller's range to be highly automated and user-friendly.

FEATURES



HIGH DEGREE OF AUTOMATION - MULTIDATA

MULTIDATA – process control system is a signature feature of Goller's range as it enables Goller's range to be highly automated, operationally steady and flexible, exceptionally user-friendly and maintenance-friendly. MULTIDATA enables high reproducibility of fabric's finishing and low energy consumption of fabric's processing by the application of recipe pre-setting and recorded in PLC and automatic temperature control, rate of residual liquor control, lye's concentration control, pH value control, water infeed and chemical dosing. MULTIDATA also enables

the business operations management system of user to be connected with the PLC of Goller's range for effective and efficient data and range operation management, for instance, the production data of Goller's range can be easily and instantly transferred from Goller's PLC to user's management system for user's production planning, inventory management, cost analysis and sales forecast used. With the adoption of MULTIDATA, the occurrence of human error can be greatly reduced and the production's stability can be immensely enhanced.

LOW TENSION FABRIC TRANSPORT

A remarkable engineering solution consists of drive system to be equipped with individual motor, which is controlled by loadcell. Compensator has been skilfully equipped with the range for adjusting the tension of running fabric from time to time. It creates an opportunity to process the most delicate fabrics in the lowest linear-tension ever. The subsequent use of customised-shaped expanders utterly guarantees the selvages of fabric to be uncurled.



EFFECTIVE TURBULENCE – KINETIC ENERGY

A perforated washing drum with a specially built-in rotor. The speed and rotating direction of rotor are adjustable to generate the required level of turbulence and cross-flow. The combination of high turbulence and low-liquor content ensures that there is no risk of staining of impurities on fabric. Optimum washing efficiency is guaranteed.

SUPERIOR WASHING EFFECT

GOLLER SINTENSA PLUS provides 3 ways washing for fabric in one compartment. The 3 ways washing includes turbulent washing, under-liquor washing and power-spray washing, which enables users to decide the frequency of washing, ranging from gentle washing to powerful washing, subject to the requirements of users.



LOW ENERGY CONSUMPTION

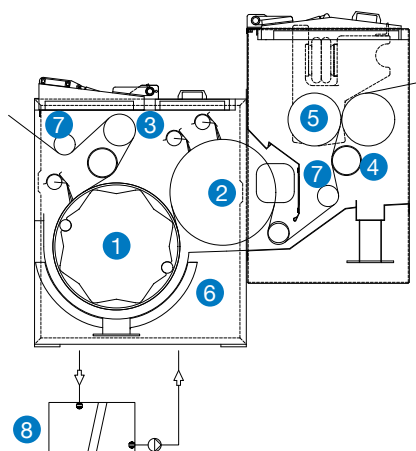
The advanced MULTIDATA programme is the basis of on-demand dosing for all media feeding system. The programmable water feeding is controlled by flow-meter whereas the computerised dosing of chemicals is weight-proportionally based. The design of whole range in closed-execution helps avoiding steam leakage. The design of counter-flow and low-liquor level washing of GOLLER SINTENSA PLUS minimizes the water and chemical usage for fabric washing.

Turbulent washing effect is generated by the interaction of perforated drum and rotor, in which enabling the liquor cross-flow of fabric

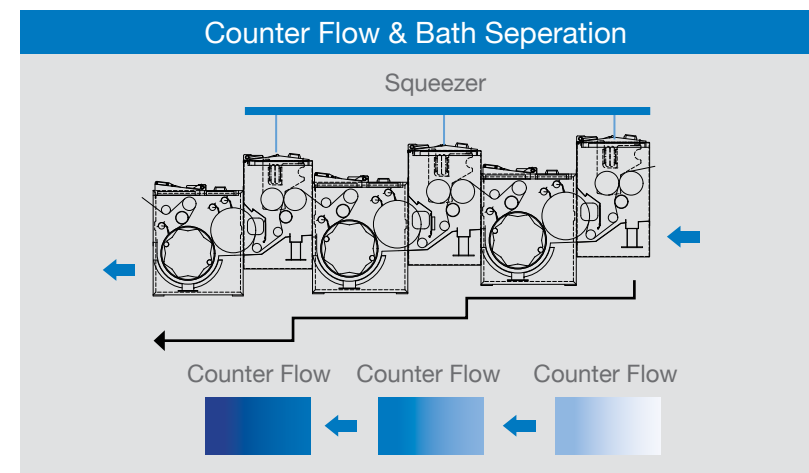
COMMON PARTS

/1 Sintensa – High Efficiency Washing Compartment

- Rotor's rotating speed and intensity are adjustable

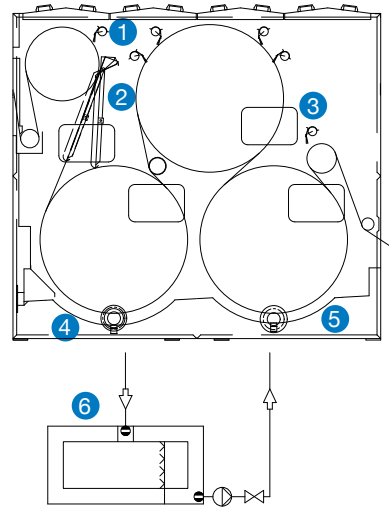


- ① Perforated drum with rotor in the middle
- ② Perforated drum
- ③ Power spray with circulation
- ④ Expander
- ⑤ 2-bowl squeezer
- ⑥ Thermplate (Indirect heating)
- ⑦ Loadcell
- ⑧ Filter (High circulation of liquor)



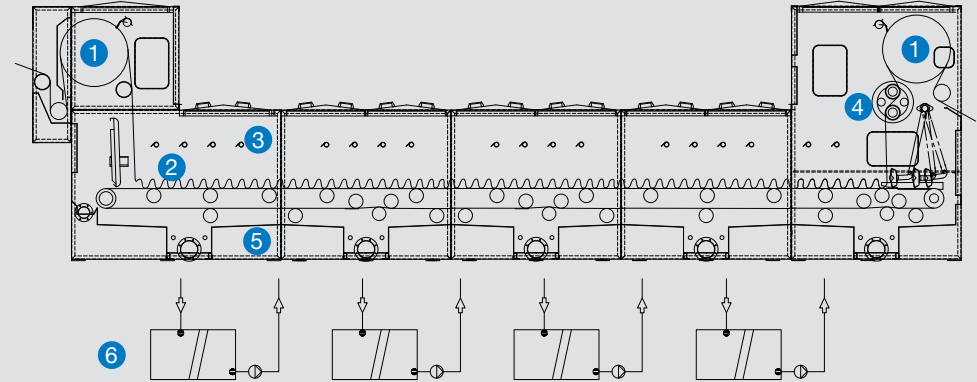
/2 Oxidator – Chemical Application & Washing Compartment

- 1 Power spray with circulation
- 2 Perforated drum (1200mm)
- 3 Large-dimensioned window
- 4 Low level of liquor required
- 5 Thermplate (Indirect heating)
- 6 Filter (High circulation of liquor)



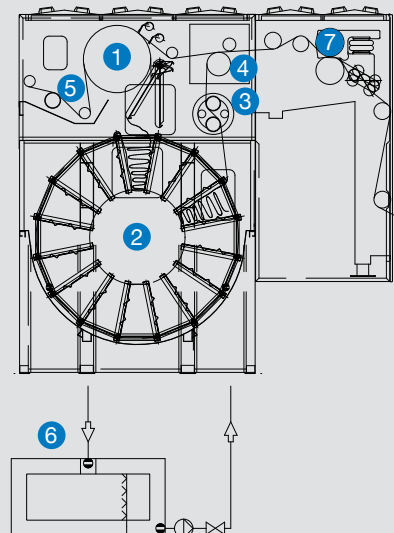
/3 Universa – Dwelling & Washing Compartment

- 1 Perforated drum
- 2 Conveyor belt
- 3 Power spray with circulation
- 4 Double-expander
- 5 Sectional drainage
- 6 Filter (High circulation of liquor)



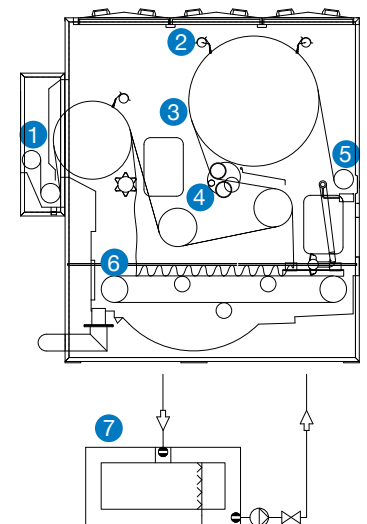
/4 Startran – Dwelling & Washing Compartment

- 1 Perforated drum
- 2 16 plaiting chambers
- 3 Double-expander
- 4 Driven roller
- 5 Expander
- 6 Filter (High circulation of liquor)
- 7 2-bowl squeezer



/5 Unirelaxa – Soaping, Dwelling & Relaxing Compartment

- 1 Expander
- 2 Power spray with circulation
- 3 Perforated drum (1000mm)
- 4 Double-expander
- 5 Loadcell
- 6 Conveyor belt
- 7 Filter (High circulation of liquor)



/6 Heat Recovery System

- Energy Saving Unit – apply wasted hot water to heat up fresh water for processing used



/7 Steam Heated Exchanger

- Pre-heat fresh water for processing used
- Stabilize the temperature of washing compartment by supplying pre-heated water



/10 Super-Clean – Self-Cleaning Rotary Filter

- Automatic filter with brush for filtering out impurities and fluffs
- Filtering process and cleaning process controlled by PLC
- Precise dosing of chemical controlled by PLC



/8 Manual Filter

- User-friendly and efficient filtering system
- Simple cleaning process



/9 Automatic Filter

- Automatic filtering process and cleaning process controlled by PLC
- Precise dosing of chemical controlled by PLC



/11 Thermplate – Indirect Heating System

- Indirect steam heating of compartment through thermplate
- No direct contact between steam and fabric helps avoiding contamination incurred on fabric
- Large-scale, efficient and even heat-up of compartment
- Easy for cleaning
- Possible use of condensate water



/12 Automatic Dosing System

- Liquid-flow controlled by flowmeter
- Precise chemical dosing controlled by PLC



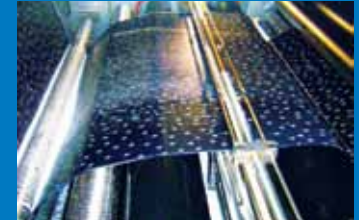
/13 Neutralization System

- On-line monitoring of pH value
- pH value regulated by PLC automatically



/14 Vacuset – Vacuum Suction Device

- Effective removal of dirt, excessive liquor, printing paste and spun oil; pick-up of fabric can be as low as 20% after processing through Vacuset



/15 2-Bowl Squeezer

- Reduce pick-up of fabric as low as to 75%



/16 Goller-FXT – High Efficiency Squeezer

- Reduce pick-up of fabric as low as to 60%



/17 Loadcell

- Effective tension-regulating unit, tension of running fabric is measured and controlled by PLC



/18 Compensator

- Effective tension-regulating unit, tension of running fabric is measured and controlled by hydraulic pressure



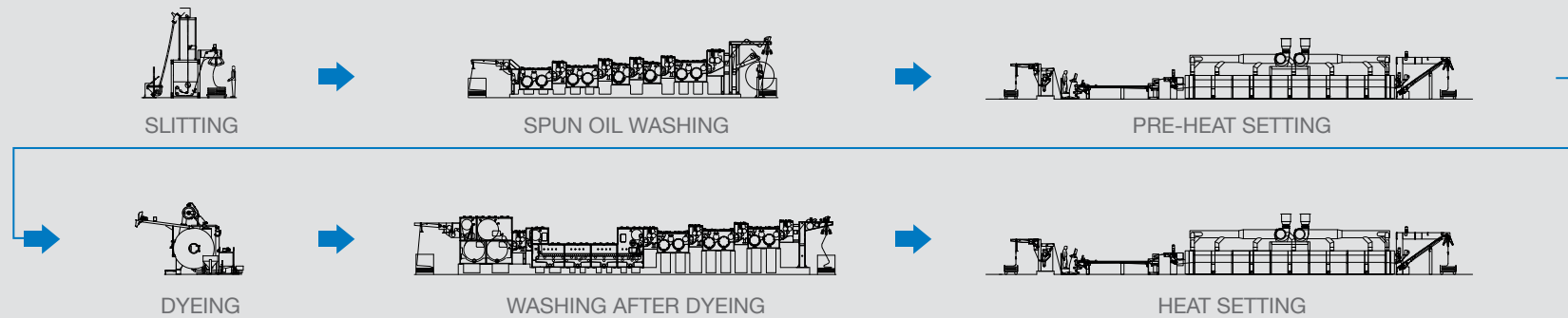
/19 Process Control System – MULTIDATA

- Visualisation of the whole range, including real-time parameter of driven motor, hydraulic valve, water infeed, temperature of compartment and cylinder dryer
- The whole production process is under operator's control
- Recipe setting and running parameters recording through PLC
- Parameters of production process can be recorded and are traceable
- Recipe management enables high reproducibility of fabric's finishing resulted
- Range's error can be recorded and is traceable
- Different level of users and limit of authority for accessing to PLC can be set on the PLC
- Remote range checking and problem fixing via Team Viewer
- Consumption data recording is available, e.g. consumption of steam, electricity, water and chemical per Kg or meter of fabric (Optional)
- Possible to be connected with the user's business operations management system for effective and efficient data and range operation management

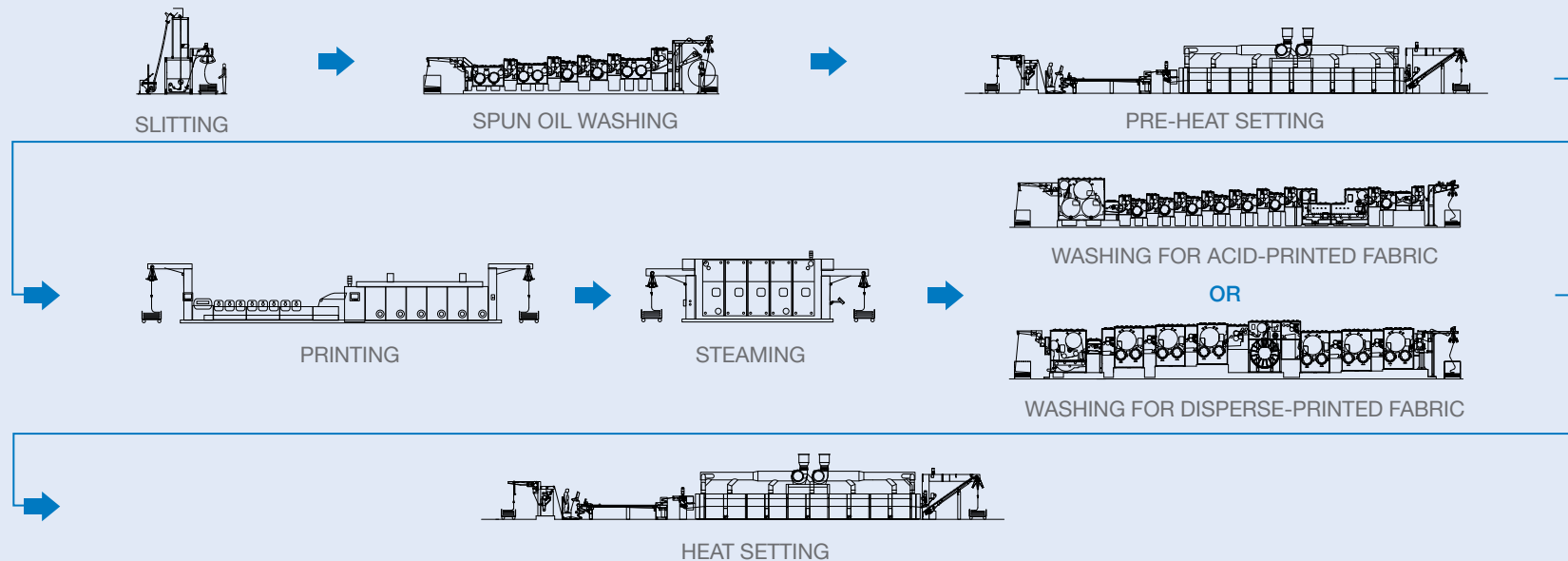


PROCESS FLOW CHART OF SYNTHETIC KNITTED FABRIC

Pretreatment, **Dyeing** and Post-treatment Processes of Synthetic Knitted Fabric



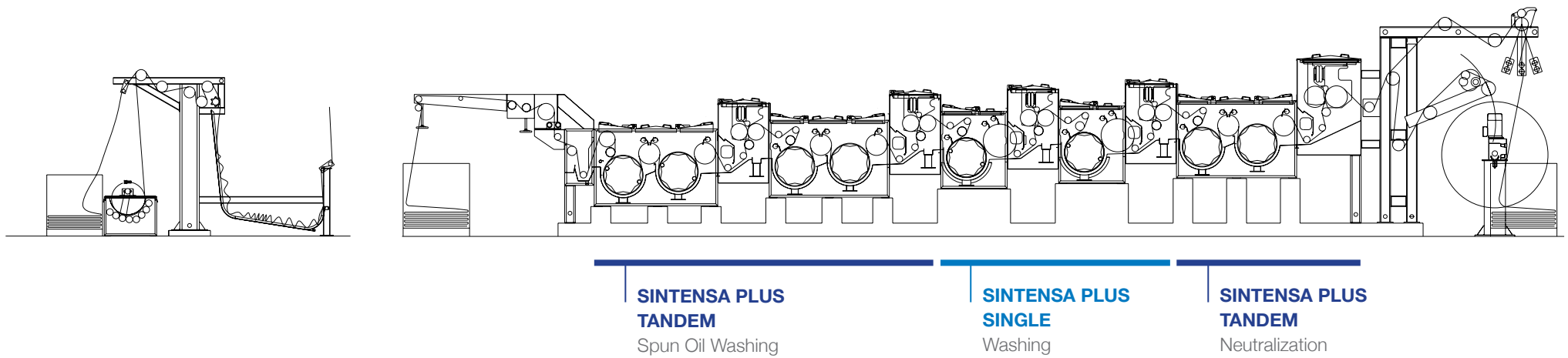
Pretreatment, **Printing** and Post-treatment Processes of Synthetic Knitted Fabric





SPUN OIL WASHING RANGE

Goller Spun Oil Washing Range has been specifically designed for spun oil washing of synthetic knitted fabric in continuous open-width form



ADVANTAGES



Even & Uniform
Spun Oil
Washing Effect



High Reproducibility
of Fabric's Finishing



Low Water
Consumption; as Low
as 4L/ Kg Fabric



Low-Tension
Fabric Transport

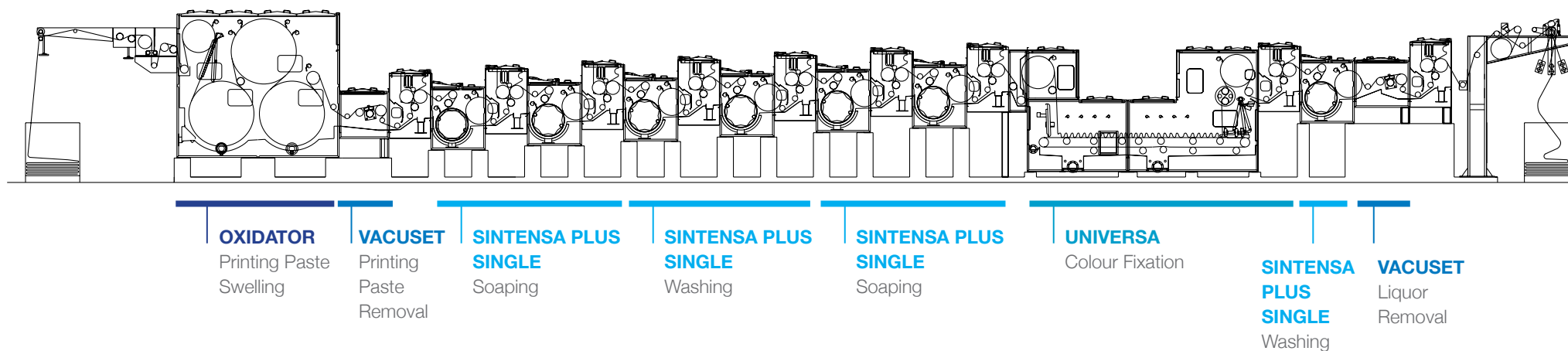


Tailing-Prevention
Fabric Transport



WASHING RANGE FOR PRINTED FABRIC - ACID-PRINTED FABRIC

Goller Washing Range for Acid-Printed Fabric has been specifically designed for washing of knitted acid-printed fabric in continuous open-width form



ADVANTAGES



High Reproducibility of Washing Effect & Capillary Effect



Even Washing Effect (Left, Middle & Right)



No Batch Deviation



Low Energy Consumption



Water Consumption; 75% Less Than the Traditional Pretreatment Process



Low-Tension Fabric Transport



Tailing-Prevention Fabric Transport



Low Elongation Rate



High Degree of Fastness

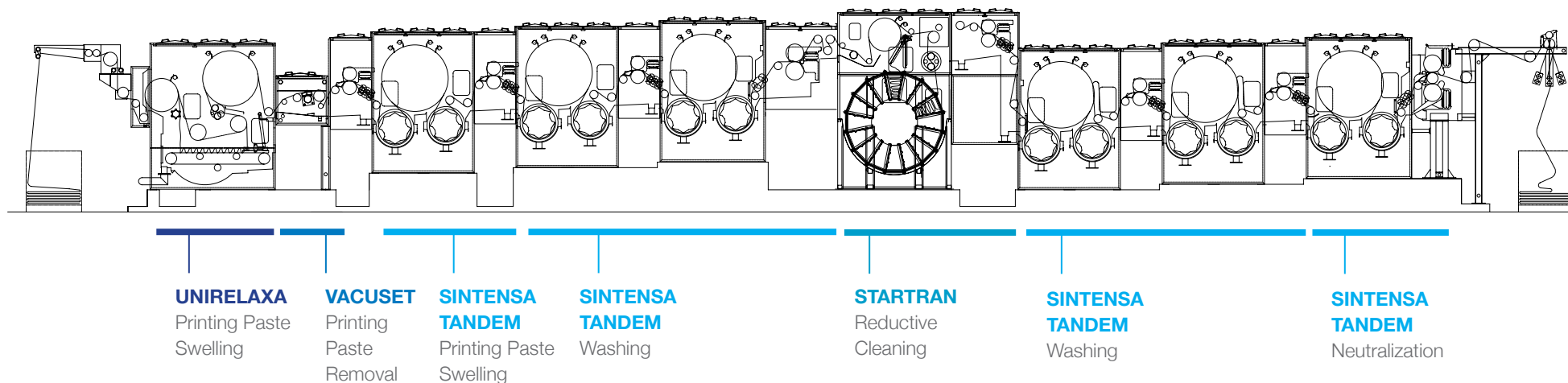


Staining-Free



WASHING RANGE FOR PRINTED FABRIC - DISPERSE-PRINTED FABRIC

Goller Washing Range for Disperse-Printed Fabric has been specifically designed for washing of knitted disperse-printed fabric in continuous open-width form



ADVANTAGES



High
Reproducibility of
Washing Effect &
Capillary Effect



Even Washing
Effect (Left,
Middle & Right)



No Batch
Deviation



Low Energy
Consumption



Water
Consumption;
75% Less Than
the Traditional
Pretreatment
Process



Low-Tension
Fabric Transport



Tailing-Prevention
Fabric Transport



Low Elongation
Rate



High Degree of
Fastness

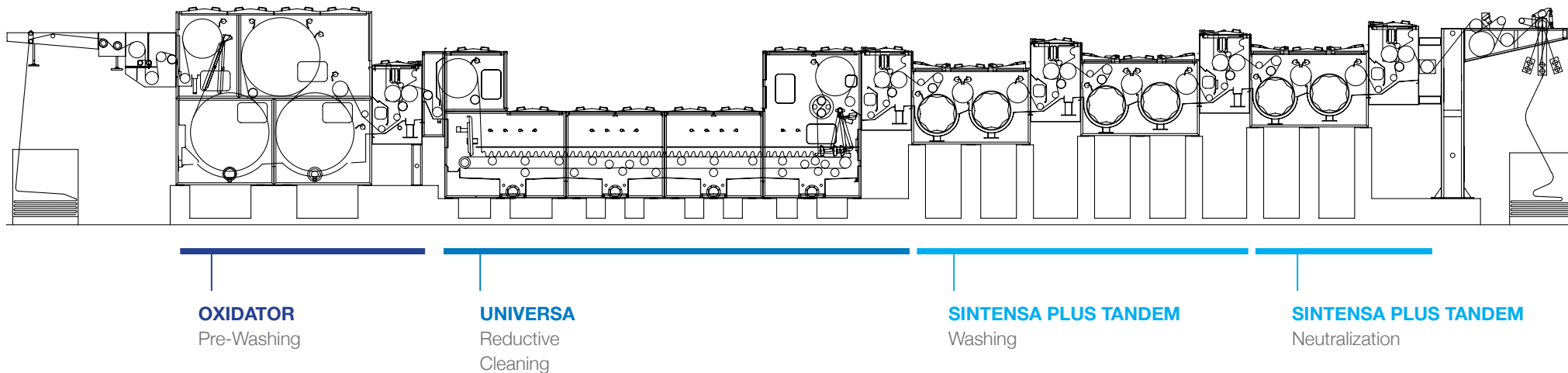


Staining-Free



WASHING RANGE FOR DYED FABRIC

Goller Washing Range for Dyed Fabric has been specifically designed for washing of synthetic knitted dyed fabric in continuous open-width form



ADVANTAGES



High
Reproducibility of
Washing Effect &
Capillary Effect



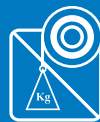
Even Washing
Effect (Left,
Middle & Right)



Low Energy
Consumption



Production
Capacity
Increased by 30%



Low-Tension
Fabric Transport



Tailing-Prevention
Fabric Transport



Environmental Consciousness

Goller cares for the environment. Goller's wet finishing ranges have been specially designed for the environmentally friendly production of fabrics, such as minimum consumption of water, auxiliary agents, steam and electricity. Recycling the wasted hot water to heat up the fresh water is also a unique feature of Goller's ranges which plays a crucial role in fostering the environmentally friendly production of fabrics

Easily Contactable

Goller has 65 agents all over the world and all of them are ready to listen to your specific requirements of the wet finishing solutions. So please come and talk to us!

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