



CELLULOSIC FIBRE WOVEN FABRIC

EFFICIENCY AND REPRODUCIBILITY -
HIGH PRODUCTION CAPACITY MEETS CONSISTENT FINISHING RESULT





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 of 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



EFFICIENCY AND REPRODUCIBILITY – HIGH PRODUCTION CAPACITY MEETS CONSISTENT FINISHING RESULT

GOLLER EFFECTA is a specialised-designed and one-for-all wet finishing solution. It can be applied for technical textile or high thread count and density woven fabric processing. It has been famed for its high degree of consistency, reliability, productivity and durability.



Efficient

GOLLER EFFECTA processes the heavy and delicate fabrics in high thread count and density by the self-developed programme with pre-set recipes and parameters, which makes efficient yet high-reproducible processing for fabric possible.



Flexible

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



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. 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 minimizes the occurrence of crease mark during fabric transport.



SUPERIOR WASHING EFFECT - NIP WASHING

The large wrapping-angle roller along with low liquor-level compartment makes nip washing and high efficiency washing for fabric possible. The tight-strand fabric guiding system together with the application of loadcell or compensator enables low-tension and crease-free fabric transport. Highly automated washing range facilitates high reproducibility of finishing result.

LOW ENERGY CONSUMPTION

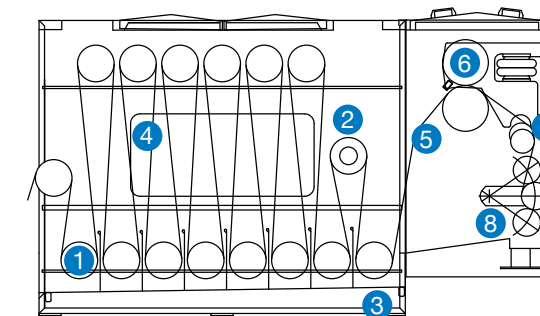
The advanced MULTIDATA programme is the basis of on-demand dosing for all media feeding system. The programmable water feeding is controlled by flow-meter whereas the computerised dosing of chemicals is weight-proportionally based. The design of whole range in closed-execution helps avoiding steam leakage.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



The combination of large wrapping-angle roller and low liquor-level compartment generates nip washing and high efficiency washing for fabric

COMMON PARTS

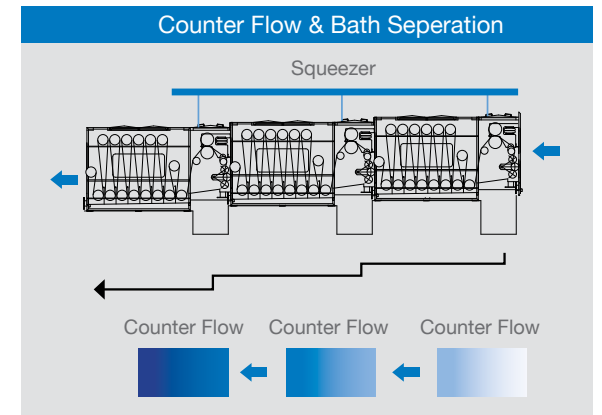
/1 Effecta – High Efficiency Washing Compartment



- 1 Large wrapping-angle roller (200mm)
- 2 Loadcell
- 3 Thermplate (Indirect heating)
- 4 Large-dimensioned window
- 5 Expander
- 6 Intermediate squeezer
- 7 Bow roller
- 8 Compensator

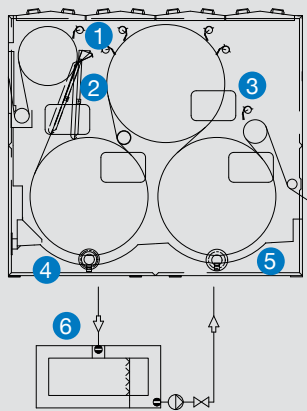
Optional:

- Breaking roller
- Double-threading
- Individual driving system
- High liquor-level or low liquor-level application



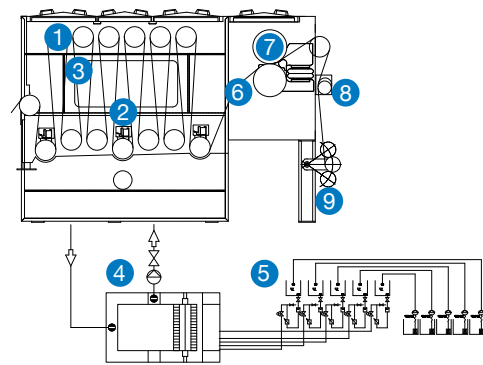
/2 Oxidator – Chemical Application & Dwelling Compartment

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



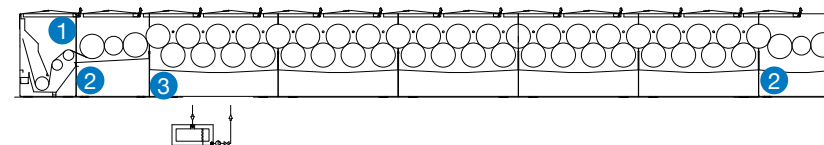
/3 Dipsat Plus – Chemical Application Compartment

- 1 Large wrapping-angle driven roller
- 2 Overflow Cascade
- 3 Large-dimensioned window
- 4 Filter (High circulation of liquor)
- 5 Chemical dosing by flowmeter
- 6 Expander
- 7 S-wrap squeezer (Pick-up 90 - 130%)
- 8 Bow roller
- 9 Compensator

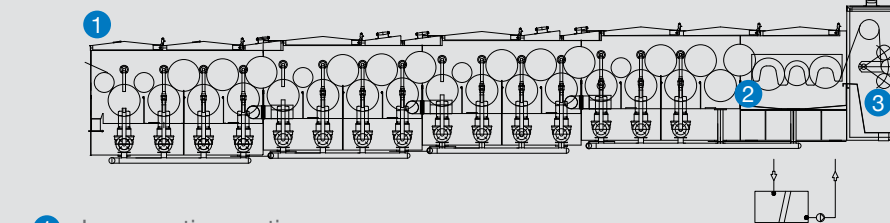


/6 Optima – Mercerising Unit (Roller Type)

- 1 Wetting trough
- 2 Three-bowl high efficiency squeezer GOLLER-FXT (10 tons)
- 3 Impregnation section
 - Highly-effective rubber-coated squeezing rollers facilitate the lye to penetrate to the core of fibre while minimizing the consumption of lye during impregnating process
 - Each section of mercerising unit to be equipped with an individual set of lye distributing pipe
 - Self-cleaning rotary filter SUPER-CLEAN for high circulation of lye
 - Tension of running fabric controlled by loadcell
 - Automatic regulation of the concentration and temperature of lye



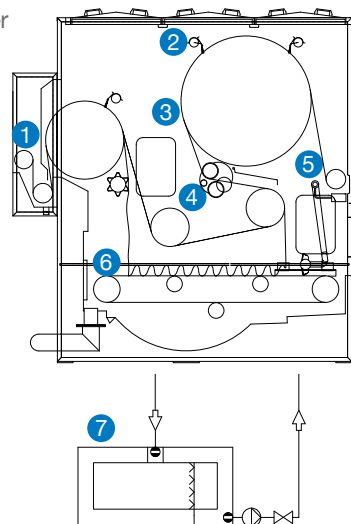
/7 Optima – Stabilising Unit



- 1 Impregnation section
 - Highly-effective rubber-coated squeezing rollers facilitate the fixing of fabric width
 - Counter flow from the subsequent washing section and liquor circulation generated by circulating pump facilitate the removal of lye
 - Countercurrent connection set for enabling counter flow from the subsequent washing section to stabilising unit
 - Each section of stabilising unit to be equipped with an individual set of circulating pump
 - Tension of running fabric controlled by loadcell
 - Automatic regulation of the concentration of weak lye
- 2 Three-bowl high efficiency squeezer GOLLER-FXT (10 tons)
- 3 Compensator

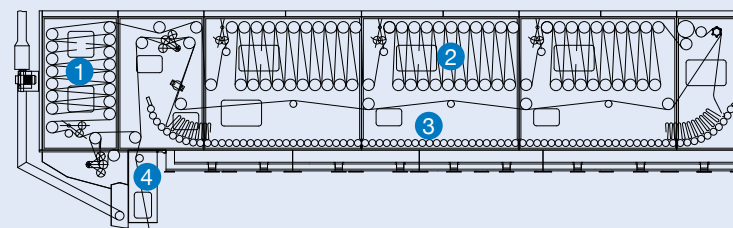
/4 Unirelaxa – Soaping, Dwelling & Relaxing Compartment

- 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)



/5 Complexa – Combi-Steamer

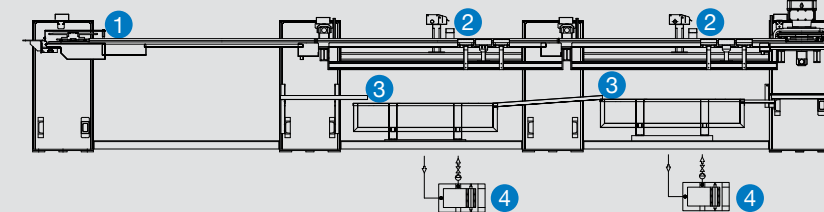
- 1 Horizontal tight-strand steamer
 - Complete absorption of bleaching liquor
 - Even application of bleaching liquor
 - Avoidance of liquor dripping and stripe formation
 - Liquor nips at the deflection point (liquor penetrate to the core of fibre)
 - Efficient and even heating-up of fabric
- 2 Vertical tight-strand steamer
 - Tight-strand fabric guiding avoids the formation of crease and cross marks during fabric transport
 - Low-tension fabric transport incurred by the frequency-regulated drives of the top guide rollers
 - Insulated and heated steamer's roof
 - Short-loop plaiter for the precise formation of fabric package
 - Fabric breakage surveillance



- 3 Rollerbed and bypass
 - Recipe-controlled fabric's filling and dwelling time
 - Uniform fabric take-off from the upper part of the fabric package
 - Precise fabric take-off controlled by sensor rollers
 - Application of safety device for the prevention of overfilling on rollerbed
 - Programme-controlled for the switch from plaiting to tight-strand
 - Sump heating ensures even distribution of saturated steam in the steamer
- 4 Passage to the subsequent washing range
 - Steam-sealed passage avoids steam leakage and air pollution
 - No cooling-down of fabric, no condensation of dissolved impurities
 - Precise centring of fabric incurred by swivelling centring device
 - Smooth fabric transport from the passage to the washing range

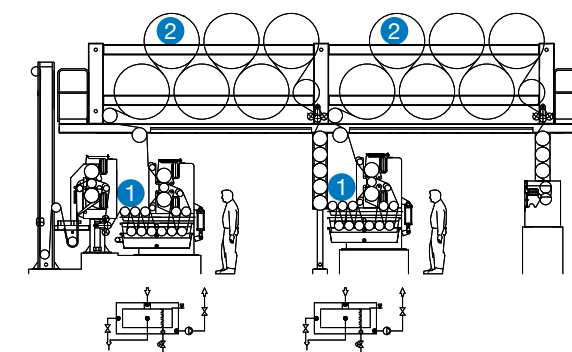
/8 Cadena – Chain Field (Clip Chain)

- 1 Horizontal clip chain
 - Infeed with selvedge expanders and edge sensors
 - Adjustable stretching force to cope with different width settings
 - Each section of chain-field is controlled by individual drives
 - Tension of running fabric regulated by loadcell
- 2 Overflow cascade and vacuum device
 - Removal of lye and fixing of fabric's width
- 3 Liquor collection tank
- 4 Self-cleaning rotary filter - SUPER-CLEAN



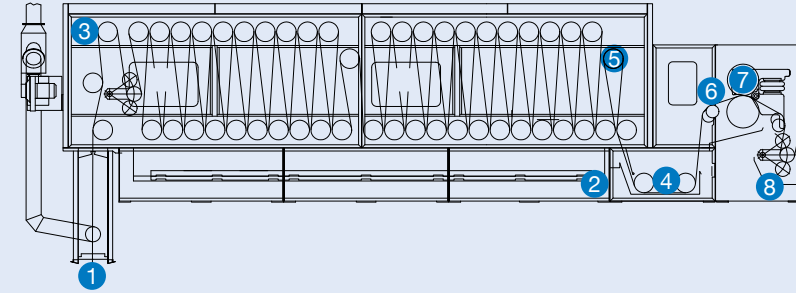
/9 Perfecta – Mercerising Unit (Airing Type)

- 1 Impregnation section
 - Goller-FXT - high efficiency squeezer facilitates the lye to penetrate to the core of fibre (applicable to the fabric in high thread count and density) by providing two times mechanical squeezing for fabric at each impregnation section
 - Even distribution of lye over the width of fabric
 - Even impregnation of lye to the core of fibre
 - Even shrinkage of fabric's warp and weft
 - Lye tank in high fabric content provides sufficient impregnation time of lye for fabric
- 2 Air Passage
 - Large guiding drums leave enough time to the lye to penetrate to the core of fibre
 - Loadcell and compensator for regulating the tension of running fabric



/10 Colora – Dyeing and Developing Steamer

- ❶ Air-sealed lock
 - Avoids steam leakage and air pollution
- ❷ Sump heating
 - Ensures the supply of 100% saturated steam and even distribution of steam in the steamer
- ❸ Insulated roof heating & Insulated walls of steamer
 - Enable even distribution of steam in the steamer under a 100% condensate-free condition
- ❹ Water-sealed lock
 - Avoids steam leakage and cools down the heated fabrics
- ❺ Loadcell
- ❻ Bow roller
- ❼ 2-bowl squeezer
- ❽ Comepnasator



/13 Economica – Dyepadder

- Highly-reproducible of shade
- Highly-flexible in colour change
- Chemical application in optimal level
- High efficiency of dyestuff's penetration to the core of fibre
- Even distribution of dyestuff over the width of fabric
- No tailing
- Can be applied for dyeing or colour development of fabric
- Crease-free and low tension fabric transport
- Automatic supply of liquor with level control
- Cooling and/ or heating of the trough
- Automatic cleaning of the trough controlled by PLC



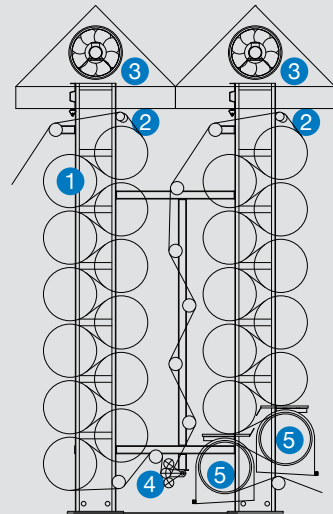
/14 Dipping Booster – Chemical Development Padder

- Chemical application in optimal level
- Even distribution of chemical over the width of fabric
- No tailing
- Crease-free and low tension fabric transport
- Automatic supply of liquor with level control



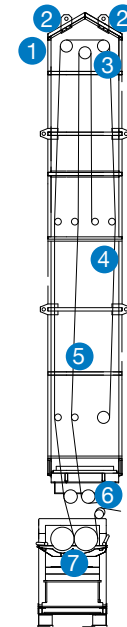
/11 Drymensa – Cylinder Dryer

- ❶ Drying cylinder
- ❷ Bow roller
- ❸ Suction hood
- ❹ Compensator
- ❺ Cooling cylinder



/12 Flashtex – Fixation Steamer

- ❶ Flash ager
- ❷ Heated & drop-free steamer's roof
- ❸ Driven-roller
- ❹ Complete insulation of chamber
- ❺ Air-free & absolutely even steam atmosphere
- ❻ Heated & condensate-free fabric entrance
- ❼ Chemical padder



/15 Unipulsa

- Pioneering design for generating turbulent washing effect
- Continuous and intensive liquor cross-flow of fabric
- Efficient liquor exchange and penetrate to the core of fibre
- Effective removal of insoluble impurities
- Enhance washing efficiency when the range is running at low speed



/16 Heat Recovery System

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



/17 Steam Heated Exchanger

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



/18 Manual Filter

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



/19 Automatic Filter

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



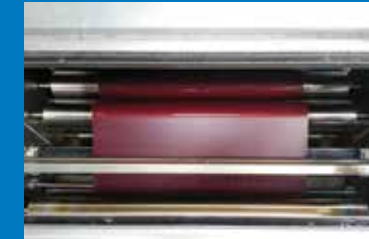
/20 Super-Clean – Self-Cleaning Rotary Filter

- 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



/24 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



/25 2-Bowl Squeezer

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



/26 Goller-FXT – High Efficiency Squeezer

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



/21 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



/22 Automatic Dosing System

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



/23 Neutralization System

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



/28 Compensator

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



/27 Loadcell

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

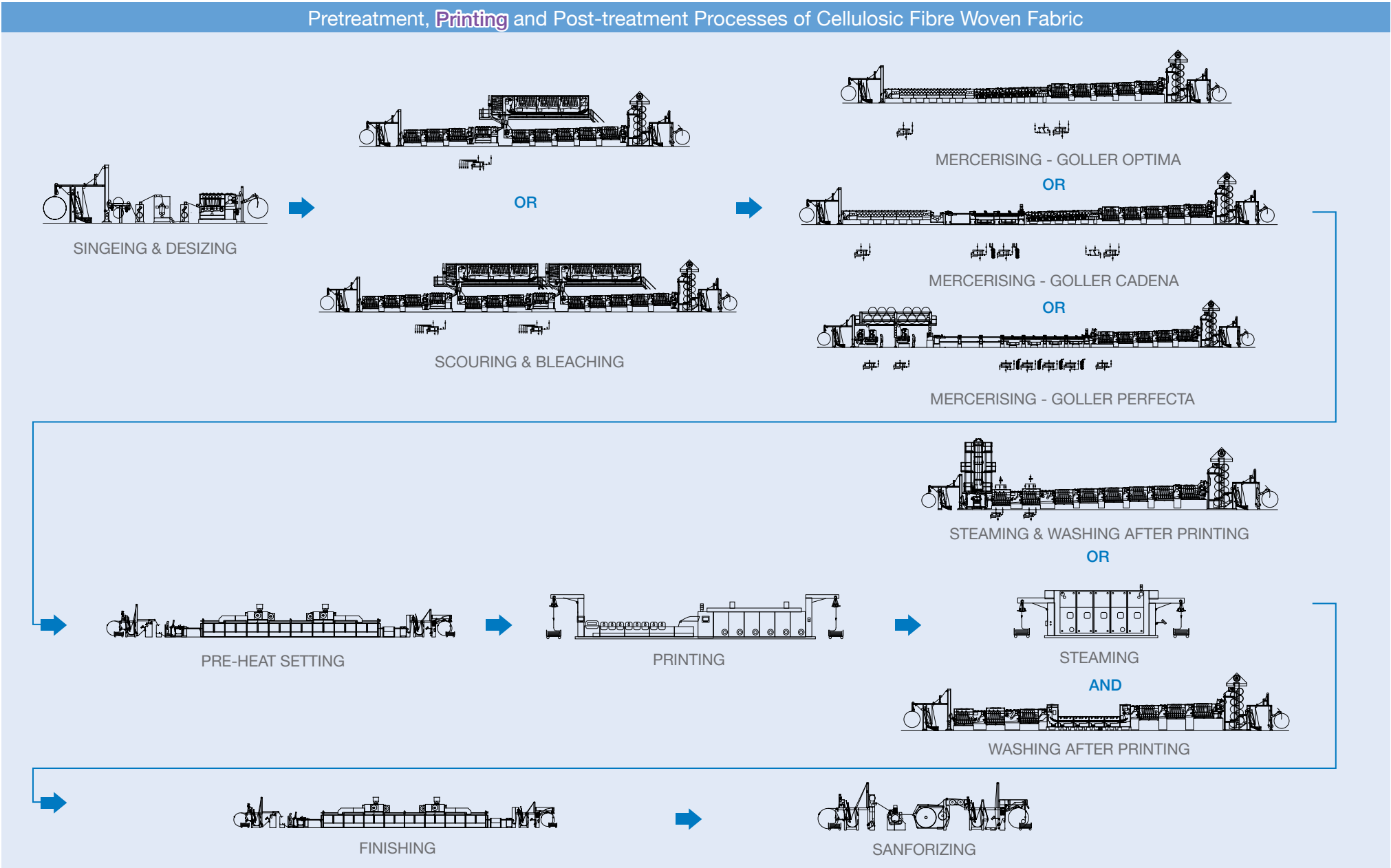
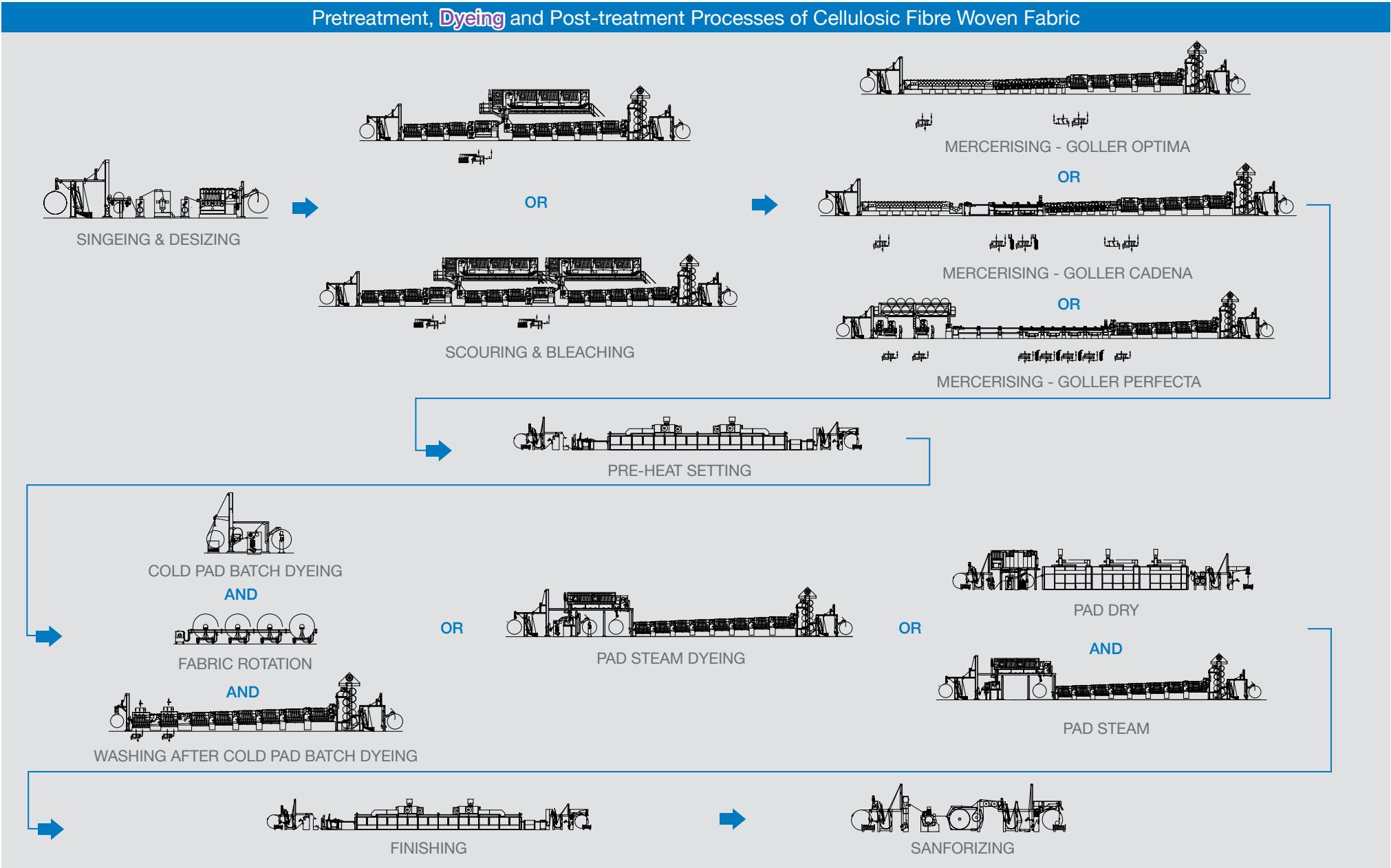


/29 Process Control System – MULTIDATA

- 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 CELLULOSIC FIBRE WOVEN FABRIC

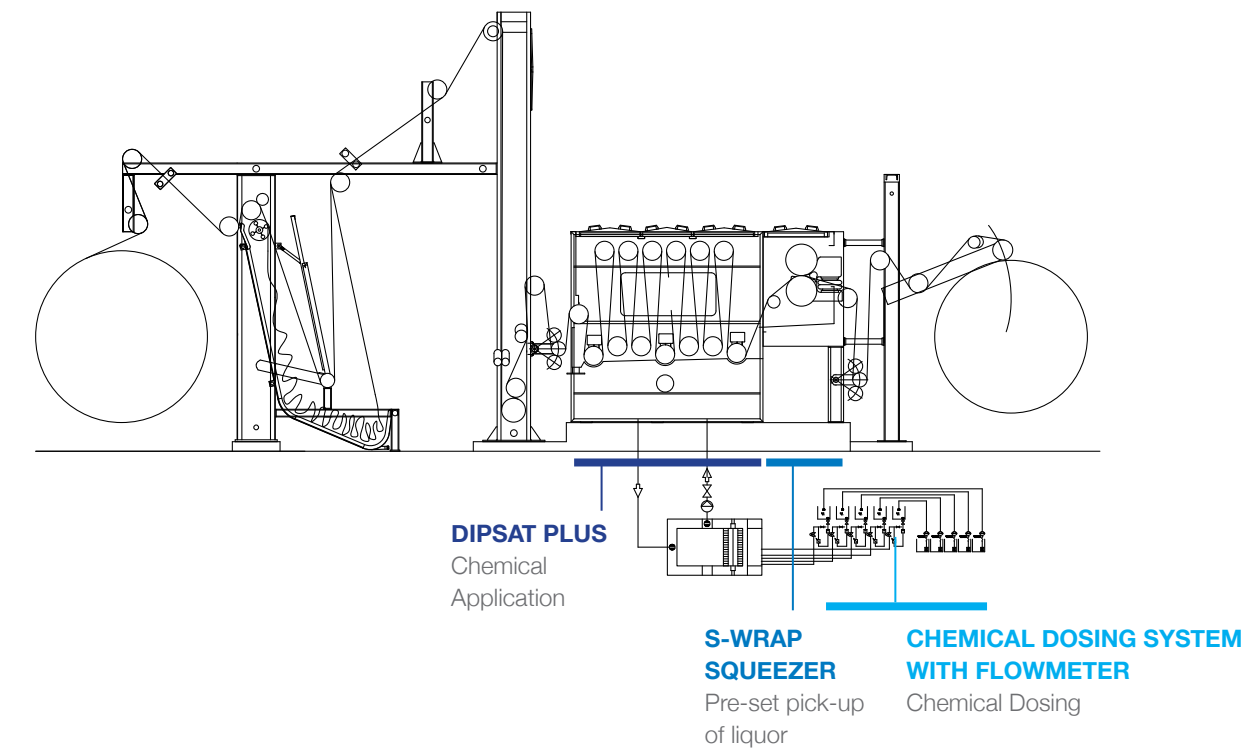




GOLLER - DESIZA

Desizing Range

Goller – Desiza has been specifically designed for desizing of cellulosic fibre woven fabric in continuous open-width form



ADVANTAGES



Even Desizing Effect (Left, Middle, Right)



Smooth Fabric Surface (Anti-Pilling)



MULTIDATA - High Reproducibility



Low Liquor Level with Quick Bath Renewal



3 Dipping Troughs for Even Chemical Application



No Accumulation of Impurity & Enzyme Killer



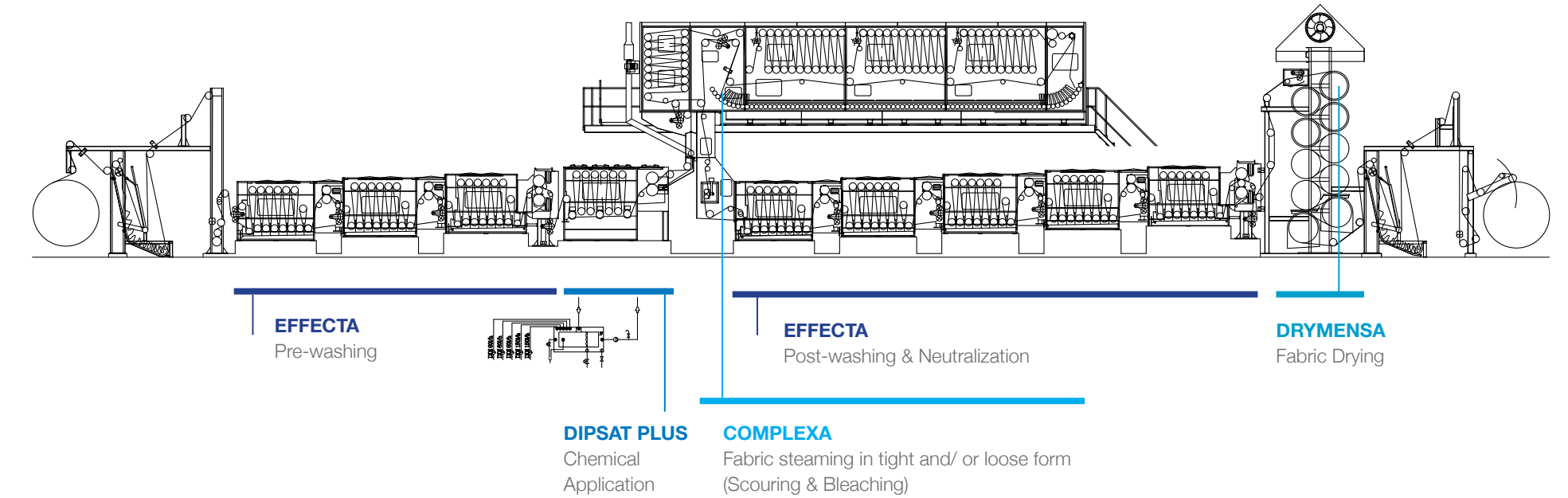
Chemical Pick-Up in Optimum Level



Low-Tension Fabric Transport



Crease-Free Fabric Transport



ADVANTAGES



Even Desizing/
Scouring/
Bleaching Effect
(Left, Middle, Right)



Smooth Fabric
Surface
(Anti-Pilling)



MULTIDATA
- High
Reproducibility



Counter-Flow
in Cascade



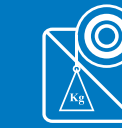
Low Level of
Liquor



Precise
Application of
Chemical



Fabric Evenly
Heated by
Saturated Steam



Low-Tension
Fabric Transport



Crease-Free
Fabric Transport

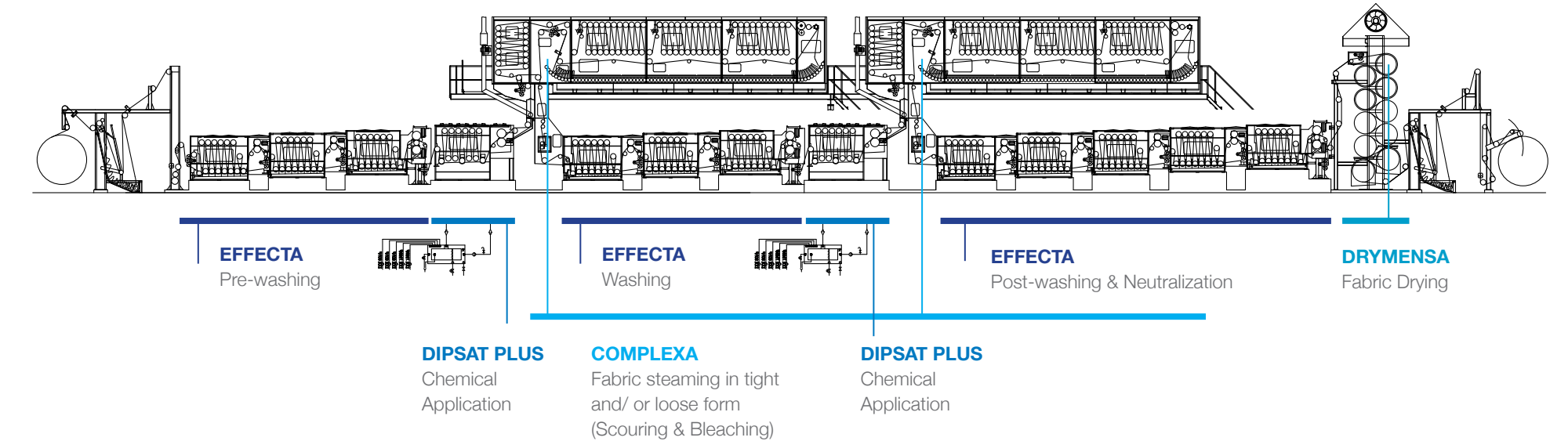


Low Energy
Consumption

GOLLER - COMPLEXA

One-Stage Scouring and Bleaching Range

Goller - Complexa has been specifically designed for scouring and bleaching of cellulosic fibre woven fabric in continuous open-width form



ADVANTAGES



Even Desizing/
Scouring/
Bleaching Effect
(Left, Middle, Right)



Smooth Fabric
Surface
(Anti-Pilling)



MULTIDATA
- High
Reproducibility



Counter-Flow
in Cascade



Low Level
of Liquor



Precise Application
of Chemical



Fabric Evenly
Heated by
Saturated Steam



Low-Tension
Fabric Transport



Crease-Free
Fabric Transport

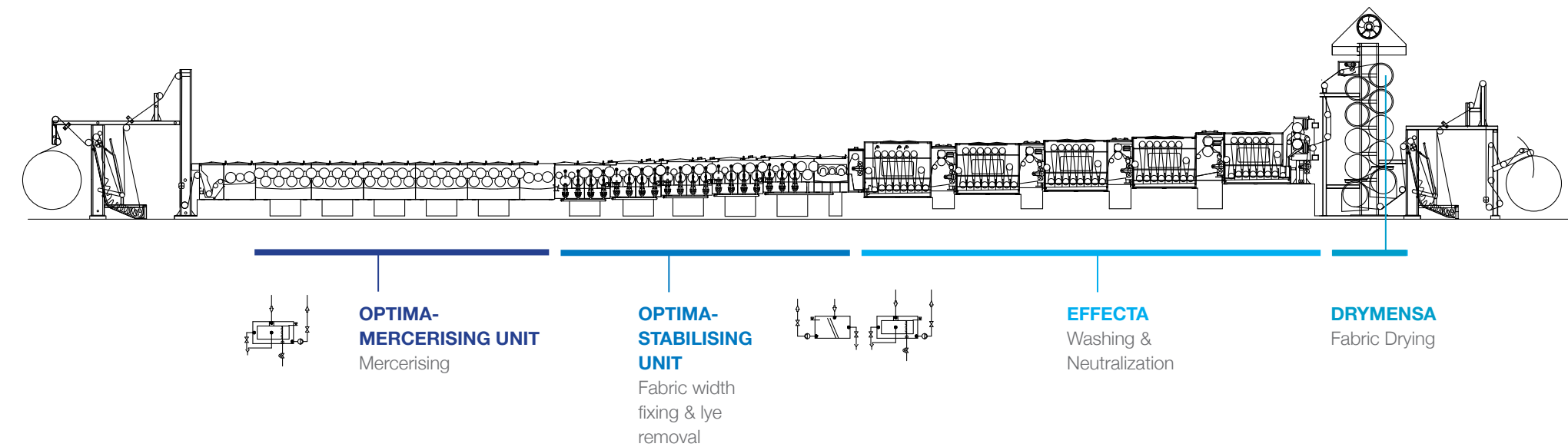


Low Energy
Consumption

GOLLER - COMPLEXA

Two-Stage Scouring and Bleaching Range

Goller - Complexa has been specifically designed for scouring and bleaching of cellulosic fibre woven fabric in continuous open-width form



ADVANTAGES



Highly-Effective
& Efficient
Impregnation



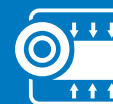
Automatic
Control for Lye
Concentration &
Temperature



Optimal Level
of Lustre



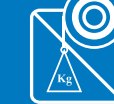
Smooth Fabric
Surface
(Anti-Pilling)



Constant
Shrinkage Over
the Width



MULTIDATA
– High
Reproducibility



Low-Tension
Fabric Transport



Crease-free
Fabric Transport



Low Consumption
of Lye

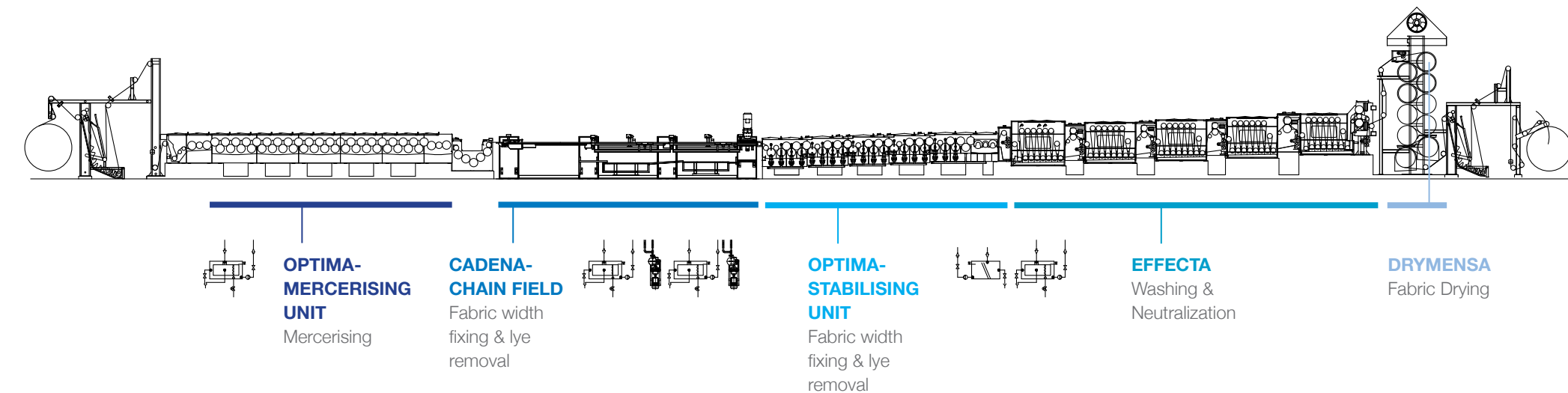


Low Energy
Consumption

GOLLER - OPTIMA

Chainless Mercerising Range

Goller - Optima has been specifically designed for mercerising of cellulosic fibre woven fabric in chainless and continuous open-width form



ADVANTAGES



Highly-Effective
& Efficient
Impregnation



Automatic
Control for Lye
Concentration &
Temperature



Optimal Level
of Lustre



Smooth Fabric
Surface
(Anti-Pilling)



Constant
Shrinkage Over
the Width



MULTIDATA
– High
Reproducibility



Low-Tension
Fabric Transport



Crease-free Fabric
Transport



Low Consumption
of Lye



Low Energy
Consumption

GOLLER - CADENA

Combined Chain and Chainless Mercerising Range

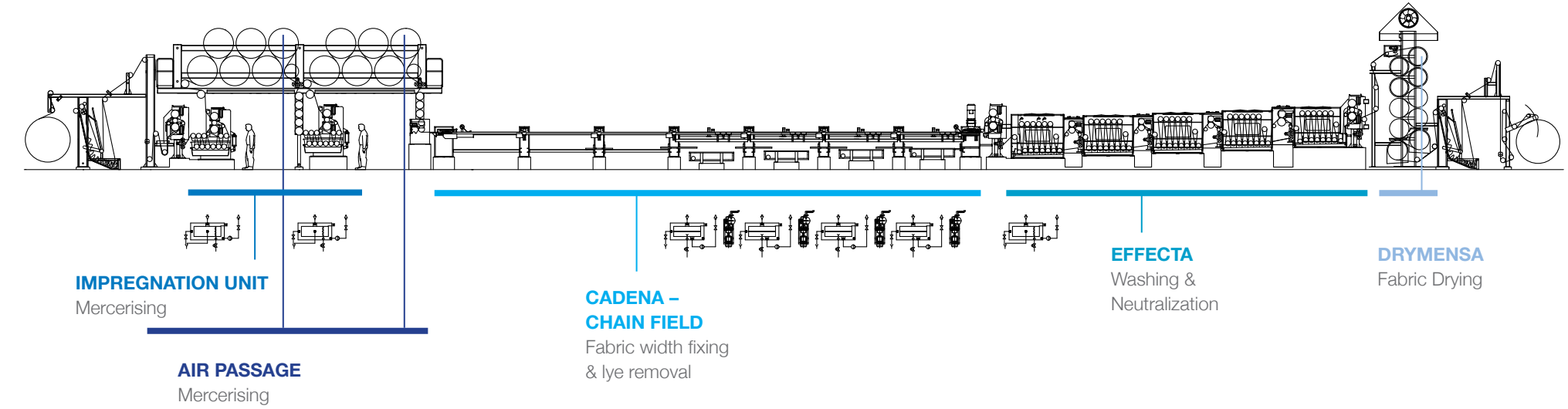
Goller - Cadena has been specifically designed for mercerising of cellulosic fibre woven fabric in combined chain and chainless and continuous open-width form



GOLLER - PERFECTA

Chain Mercerising Range

Goller - Perfecta has been specifically designed for mercerising of cellulosic fibre woven fabric in chain and continuous open-width form



ADVANTAGES



Highly-Effective
& Efficient
Impregnation



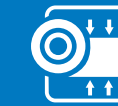
Automatic
Control for Lye
Concentration &
Temperature



Optimal Level
of Lustre



Smooth Fabric
Surface
(Anti-Pilling)



Constant
Shrinkage Over
the Width



MULTIDATA
- High
Reproducibility



Low-Tension
Fabric Transport



Crease-free
Fabric Transport



Low Consumption
of Lye

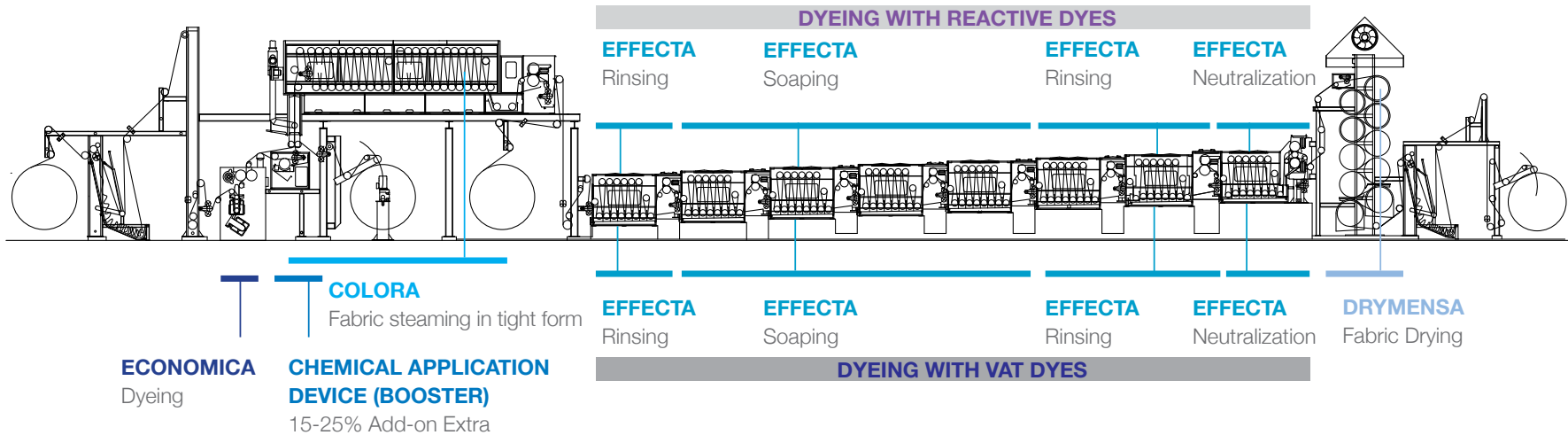


Low Energy
Consumption

GOLLER - COLORA

Pad Steam Dyeing Range

Goller - Colora has been specifically designed for continuous dyeing and/ or color developing of cellulosic fibre woven fabric in continuous open-width form



ADVANTAGES



High
Reproducibility of
Shade



No Centre-Side
Variation



No Tailing



MULTIDATA
– High
Reproducibility



Applicable for
Various Type of
Dyestuff



Quick Colour
Change



Effective Dyestuff
Penetration



Low-Tension
Fabric Transport



Crease-free
Fabric Transport



Low Consumption
of Chemical



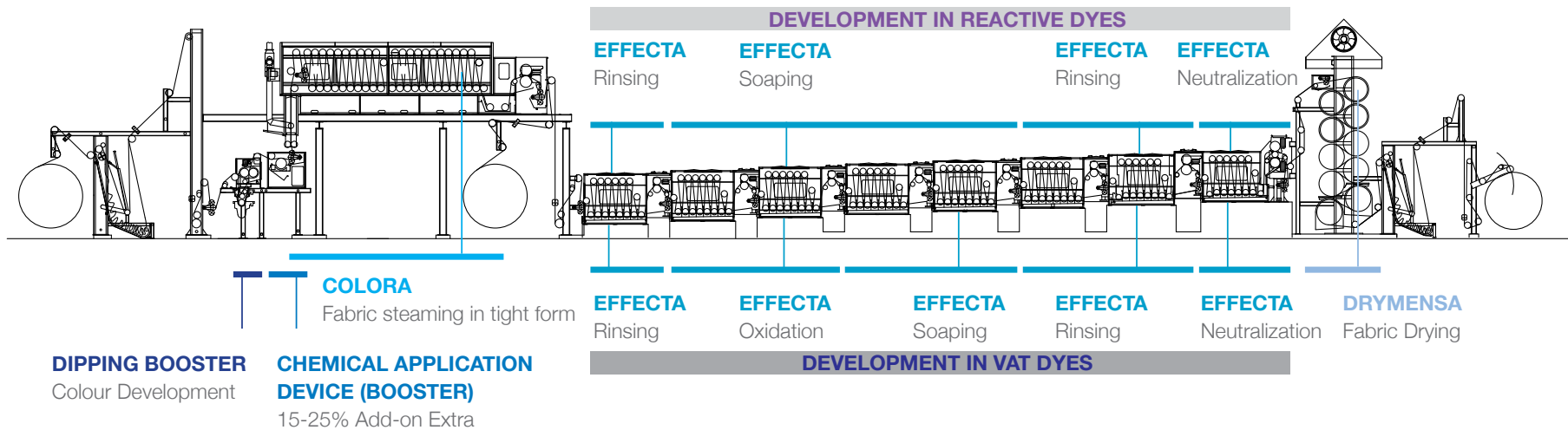
Low Energy
Consumption



GOLLER - COLORA

Pad Steam Range

Goller - Colora has been specifically designed for continuous dyeing and/ or color developing of cellulosic fibre woven fabric in continuous open-width form

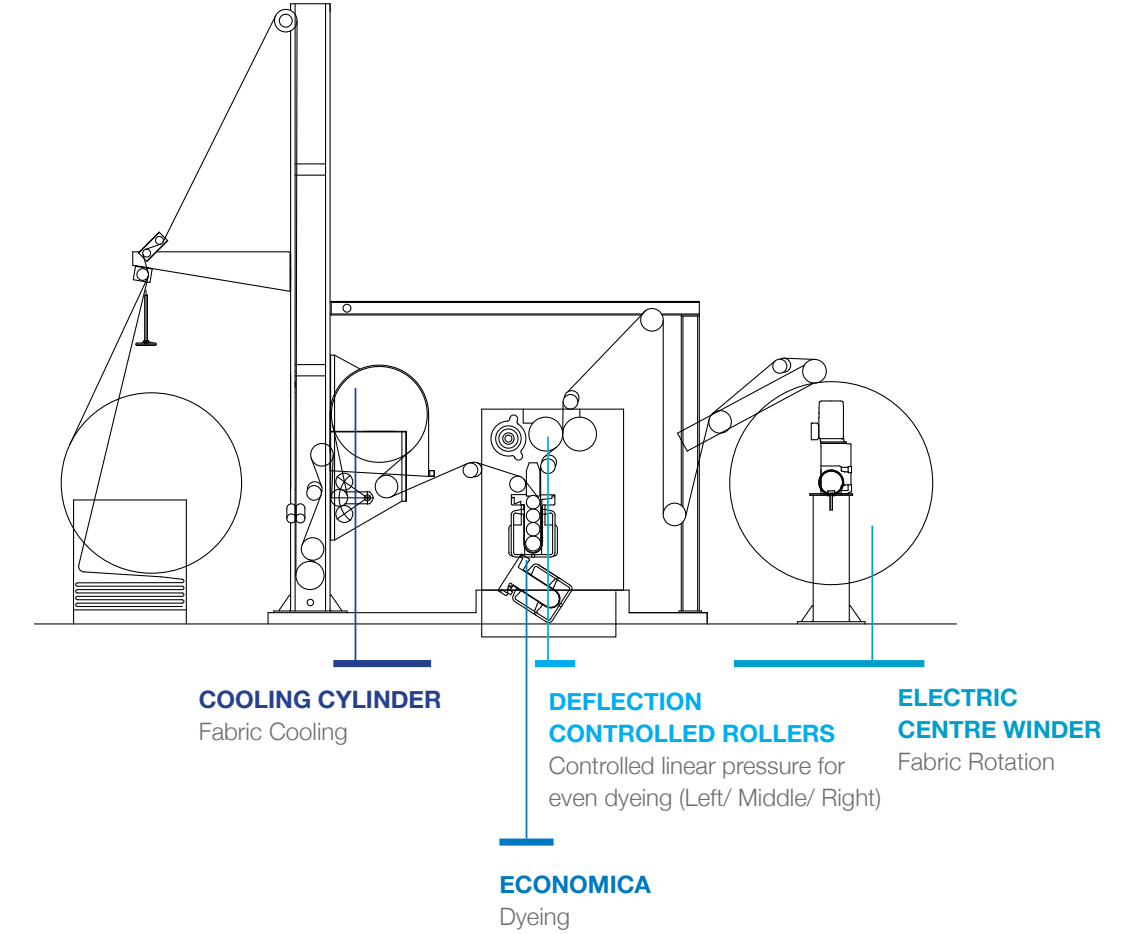




GOLLER - ECONOMICA

Cold Pad Batch Dyeing Range

Goller – Economica has been specifically designed for cold pad batch dyeing of cellulosic fibre woven fabric in continuous open-width form



ADVANTAGES



Even Dyeing
Over the Width
of Fabric



High
Reproducibility
of Shade



MULTIDATA
– High
Reproducibility



Applicable for
Various Type of
Dyestuff



Quick Colour
Change



Constant Level
of Dyestuff
Pick-Up



Automatic
Self-Cleaning
System



Low-Tension
Fabric Transport



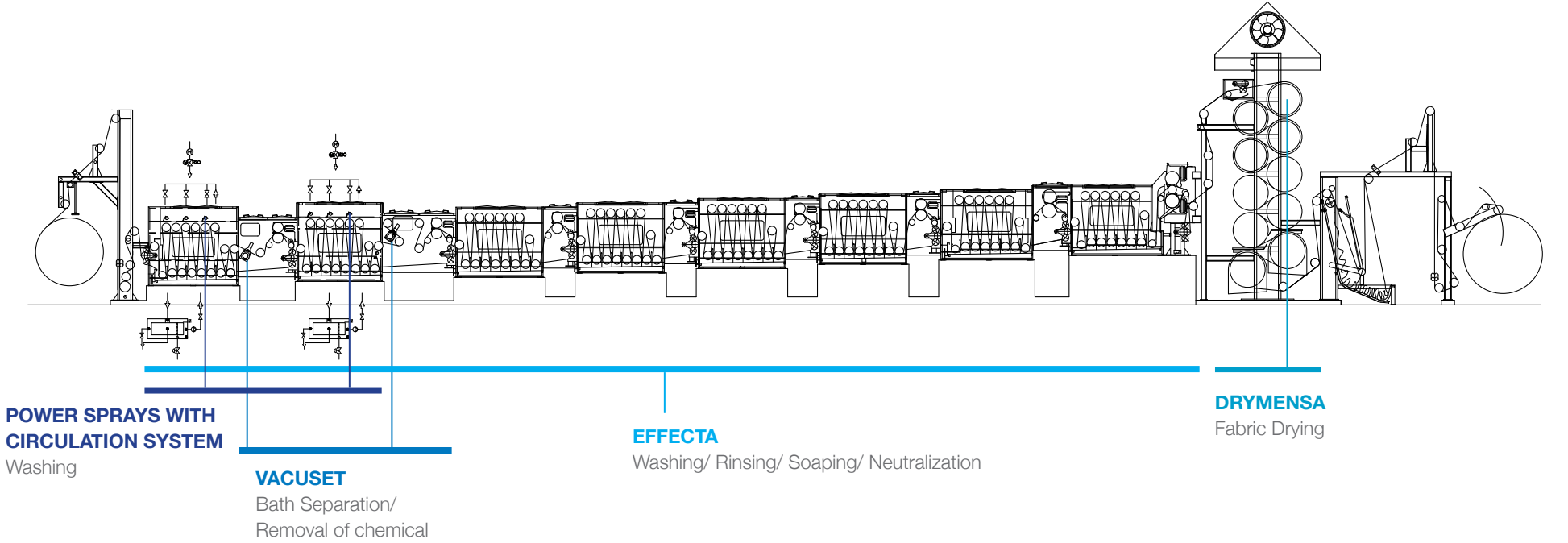
Crease-free
Fabric Transport



Low Consumption
of Chemical



Low Energy
Consumption



ADVANTAGES



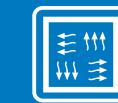
High
Reproducibility of
Fabric's Finishing



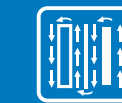
MULTIDATA
- High
Reproducibility



Continuous &
Numerous Nip
Washing & Bath
Separation



Compartment
Being Evenly
Heated-Up -
Thermplate



Counter-Flow in
Cascade



Low Level of
Liquor



Precise Application
of Chemical



Low-Tension
Fabric Transport



Crease-free
Fabric Transport

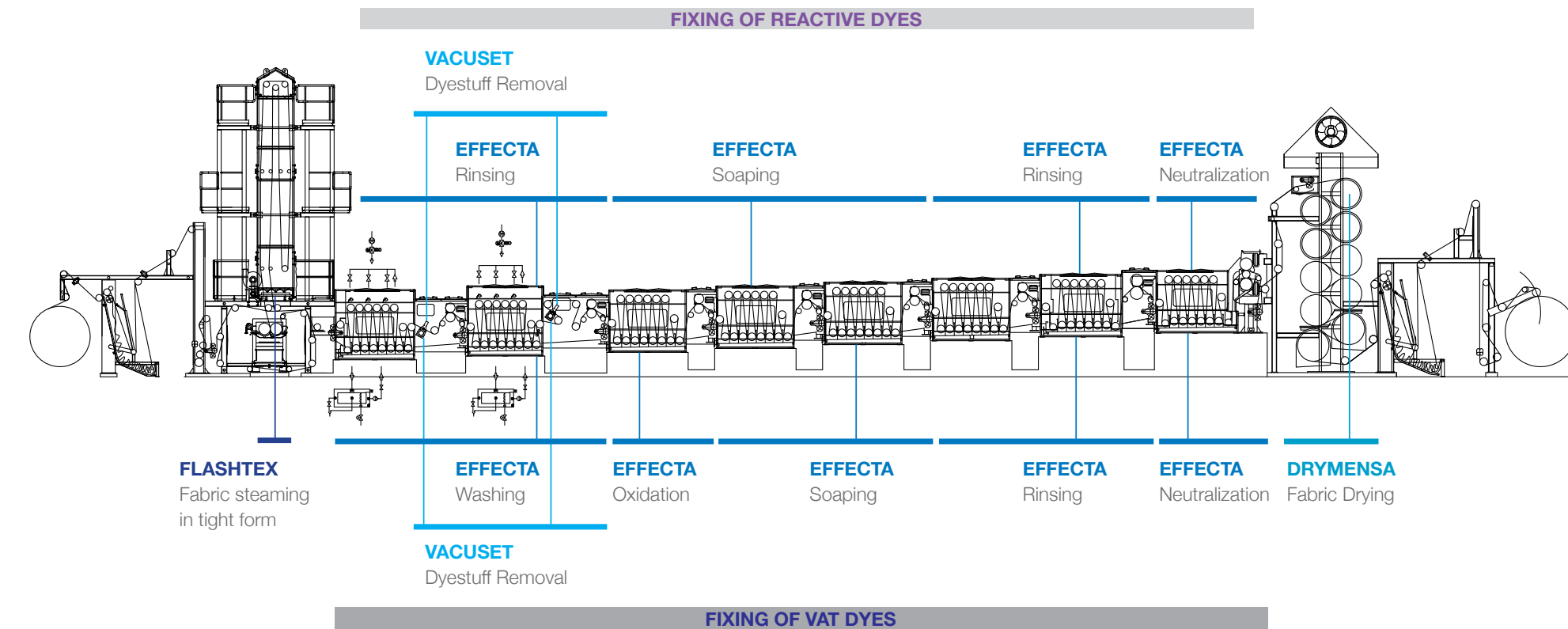


Low Energy
Consumption

GOLLER - EFFECTA

Washing Range

Goller – Effecta has been specifically designed for various washing applications of cellulosic fibre woven fabric in continuous open-width form, such as washing after cold pad batch bleaching, washing after cold pad batch dyeing and washing after printing



ADVANTAGES



High Fixation Rate



High Reproducibility of Shade



Evenness of Shade Over the Width of Fabric



MULTIDATA - High Reproducibility



Steam Evenly Distributed in the Steamer



Applicable for Various Type of Dyestuff



Low-Tension Fabric Transport



Crease-free Fabric Transport



Low Consumption of Steam



Low Energy Consumption

GOLLER - FLASHTEX

Dyestuff Fixation and Washing Range

Goller - Flashtex has been specifically designed for fixing the dyestuffs on cellulosic fibre woven fabric in continuous open-width form



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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