CELLULOSIC FIBRE WOVEN FABRIC

EFFICIENCY AND REPRODUCIBILITY - HIGH PRODUCTION CAPACITY MEETS CONSISTENT FINISHING RESULT
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.

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 tailor-made to fulfill 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, lyocell 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 product’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 custom-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.

COMMON PARTS

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

Unirelaxa – Soaping,
Dwelling Compartment

Oxidator – Chemical Application &

Conveyor belt
Loadcell
Double-expander
Perforated drum (1000mm)
Power spray with circulation
Expander
S-wrap squeezer (Pick-up 90 - 130%)
Compensator

Complexa – Combi-Steamer

Horizontal tight-strand steamer
- Complete absorption of stitching liquid
- Even application of stitching liquid
- Avoidance of stitching liquid dripping and drip formation
- Inquire tips at the deflection point (broad fabric to the case of thin)
- Efficient and even evaporation of fabric

Vertical tight-strand steamer
- Tight-strand fabric guiding avoids the formation of crease and core marks
- Balanced liquid 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

Passage to the subsequent washing range
- Steam-softened passage avoids steam leakage and air pollution
- No coating down of fabric, no condensation of dissolved impurities
- Precise centering of fabric by swelling centering device
- Smooth fabric transport from the passage to the washing range

Optima – Chemical Application Compartment

Large wrapping-angle driven roller
Overflow Cascade
Large-dimensioned window
Filter (High circulation of liquor)
Chemical dosing by flowmeter
Expander
S-wrap squeezer (Pick-up 90 - 130%)
Compensator

Optima – Mercerising Unit (Roller Type)

Wetting trough
Three-box high-efficiency squeezer GOLLER-FTX (10 tons)

Imregnation section
- Highly effective rubber-coated squeezing rollers facilitate the lyo to penetrate to the core of fabric while minimizing the consumption of lyo during impregnating process
- Each section of mercerising unit is equipped with an individual set of lyo-distributing pipe
- Self-cleaning roller FLUOR-CLARK for high circulation of lyo
- Tension of running fabric controlled by loadcell
- Automatic regulation of the concentration and temperature of lyo

Cadena – Chain Field (Clip Chain)

Horizontal clip chain
- Meshed with selective exchanger and edge sensors
- Adjustable stretching force to cope with different width settings
- Each section of mercerising unit is controlled by individual drives
- Tension of running fabric regulated by loadcell
- Overfeed cascade and valve device
- Removal of lye and lye of fabric's width
- Lipstick collection tank
- Self-cleaning rotary filter - SUPER-CLEAN

Perfecta – Mercerising Unit (Air Type)

Goller-FXT - high efficiency squeezer facilitates the fixing of fabric
- Counterflow from the subsequent washing section and lye circulated generated by circulating pump facilitates the fixing of fabric at each impregnation section
- Large guide rolls associated with short fabric transport facilitates smooth fabric transport and avoids squeezing saturation
- Automatic regulator of the concentration and temperature of lyo
- Lye trough can be lifted up and down to ease the maintenance and cleaning of trough

Air Passage
- Large guide rolls leave enough time to the fabric to penetrate to the core of fabric
- Localized and compensator for regulating the tension of running fabric

COMMON PARTS

Unirelaxa – Soaping, Dwelling & Relaxing Compartment

1/2 Power spray with circulation
Perforated drum (3000mm)
Large-dimensioned window
Low level of liquor required
Thermosphere (Indirect heating)
Filter (High circulation of liquor)

1/3 Dipsat Plus – Chemical Application Compartment

Large wrapping-angle driven roller
Overflow Cascade
Large-dimensioned window
Filter (High circulation of liquor)
Chemical dosing by flowmeter
S-wrap squeezer (Pick-up 90 - 130%)
Compensator

1/4 Unirelaxa – Soaping, Dwelling & Relaxing Compartment

Horizontal tight-strand steamer
- Complete absorption of stitching liquid
- Even application of stitching liquid
- Avoidance of stitching liquid dripping and drip formation
- Inquire tips at the deflection point (broad fabric to the case of thin)
- Efficient and even evaporation of fabric

Vertical tight-strand steamer
- Tight-strand fabric guiding avoids the formation of crease and core marks
- Balanced liquid 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

1/5 Complexa – Combi-Steamer

1/6 Optima – Mercerising Unit (Roller Type)

Wetting trough
Three-box high-efficiency squeezer GOLLER-FTX (10 tons)

Imregnation section
- Highly effective rubber-coated squeezing rollers facilitate the lyo to penetrate to the core of fabric while minimizing the consumption of lyo during impregnating process
- Each section of mercerising unit is equipped with an individual set of lyo-distributing pipe
- Self-cleaning roller FLUOR-CLARK for high circulation of lyo
- Tension of running fabric controlled by loadcell
- Automatic regulation of the concentration and temperature of lyo

1/7 Optima – Stabilising Unit

Imregnation section
- Highly effective rubber-coated squeezing rollers facilitate the lyo to penetrate to the core of fabric while minimizing the consumption of lyo during impregnating process
- Counterflow from the subsequent washing section and lye circulated generated by circulating pump facilitates the fixing of fabric at each impregnation section
- Countermechanism connection set for washing counterflow from the subsequent washing section to stabilizing unit
- Each section of stabilizing unit is 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
- Three-box high-efficiency squeezer GOLLER-FTX (10 tons)
- Compensator

1/8 Cadena – Chain Field (Clip Chain)

Horizontal clip chain
- Meshed with selective exchanger and edge sensors
- Adjustable stretching force to cope with different width settings
- Each section of mercerising unit is controlled by individual drives
- Tension of running fabric regulated by loadcell
- Overfeed cascade and valve device
- Removal of lye and lye of fabric's width
- Lipstick collection tank
- Self-cleaning rotary filter - SUPER-CLEAN

1/9 Perfecta – Mercerising Unit (Air Type)

Goller-FXT - high efficiency squeezer facilitates the fixing of fabric
- Counterflow from the subsequent washing section and lye circulated generated by circulating pump facilitates the fixing of fabric at each impregnation section
- Large guide rolls associated with short fabric transport facilitates smooth fabric transport and avoids squeezing saturation
- Automatic regulator of the concentration and temperature of lyo
- Lye trough can be lifted up and down to ease the maintenance and cleaning of trough

Air Passage
- Large guide rolls leave enough time to the fabric to penetrate to the core of fabric
- Localized and compensator for regulating the tension of running fabric
Colora – Dyeing and Developing Steamer

- Air-sealed lock
- Avoids steam leakage and air pollution
- Sump heating
- Ensures the supply of 100% saturated steam and even distribution of steam in the steamer
- Insulated roof heating & insulated walls of steamer
- Enables even distribution of steam in the steamer under a 100% condensate-free condition

Drymensa – Cylinder Dryer

- Drying cylinder
- Bow roller
- Suction hood
- Compensator
- Cooling cylinder

Flashtex – Fixation Steamer

- Flash ager
- Heated & drop-free steamer's roof
- Drive-roller
- Complete insulation of chamber
- Air-free & absolutely even steam atmosphere
- Heated & condensate-free fabric entrance
- Chemical padder

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 soluble impurities
- Enhance washing efficiency when the range is running at low speed

Economica – Dyepadder

- Highly-reproducible of shade
- Highly-flexible in colour change
- Chemical application in optimal level
- High efficiency of dyestuff penetration to the core of fibre
- Even distribution of dyestuff over the width of fabric
- No bleeding
- Can be applied for dying or colour development of fabric
- Crease-free and low tension fabric transport
- Automatic supply of liquor with level control

Heat Recovery System

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

Dipping Booster – Chemical Development Padder

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

Heat Exchanger

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

Heat Exchanger

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

Common Parts
Process Control System – MULTIDATA

- Visualization 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
- 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

- Smooth Fabric Surface (Anti-Pilling)
- Even Desizing Effect (Left, Middle, Right)
- Smooth Fabric Surface (Anti-Pilling)
- Low-Tension Fabric Transport
- Crease-Free Fabric Transport
- No Accumulation of Impurity & Enzyme Killer
- 3-Dipping Sequence for Even Chemical Application
- Low Liquor Level with Quick Bath Renewal
- Chemical Management in Optimum Level
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.
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.
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.
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 & Repeatable Impregnation
- Automatic Control of Lye Concentration & Temperature
- Smooth Fabric Surface (Anti-Pilling)
- Constant Shrinkage Over the Width
- Low-Tension Fabric Transport
- Crease-Free Fabric Transport
- Low Consumption of Lye
- Low Energy Consumption
- High Reproducibility
- Automatic Control for Lye Concentration & Temperature
- Highly-Effective & Efficient Impregnation
- Constant Shrinkage Over the Width
- Optimal Level of Lustre
- Smooth Fabric Surface (Anti-Pilling)
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
- Quick Colour Change
- Effective Dyestuff Penetration
- Low Consumption of Chemical
- Low Energy Consumption
- Applicable for Various Type of Dyestuff
- Low-Vesicle Fabric Transport
- Crease-Free Fabric Transport
- No Tailing
- No Centre-Side Variation

ECONOMICA
Dyeing

CHEMICAL APPLICATION DEVICE (BOOSTER)
15-25% Add-on Extra

EFFECTA
Rinsing

EFFECTA
Soaping

EFFECTA
Neutralization

DYMENSA
Fabric Drying

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.

PAD STEAM DYEING RANGE/ PAD STEAM RANGE

DYEING WITH REACTIVE DYES

DYEING WITH VACUUM DYES

DEVELOPMENT IN REACTIVE DYES

DEVELOPMENT IN VACUUM DYES

PAD STEAM DYEING RANGE/ PAD STEAM RANGE
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

- High Reproducibility
- Automatic Self-Cleaning System
- Applicable for Various Type of Dyestuff
- Low-Tension Fabric Transport
- Crease-Free Fabric Transport
- Low Consumption of Chemical
- Low Energy Consumption
- Even Dyeing
- High Reproducibility of Shade
- Multitasking Reproducibility
- Quick Colour Change
- Constant Level of Dyestuff Pick-Up
- Automatic Self-Cleaning System
- Low-Tension Fabric Transport
- Crease-Free Fabric Transport

COLD PAD BATCH DYEING RANGE
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.
GOLLER - FLASHTEX
Dyestuff Fixation and Washing Range

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

ADVANTAGES

- Crease-free Fabric Transport
- Low Consumption of Steam
- Low-Tension Fabric Transport
- Low Energy Consumption
- High Reproducibility of Shade
- High Fixation Rate

DYESTUFF FIXATION AND WASHING RANGE
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!