



“Smart Dyeing & Finishing CHTC FONG'S Innovations”



*FONG'S TECWIN:
High Temperature
Dyeing Machine.*

CHTC Fong's has been committed to the development and manufacturing of dyeing and finishing equipment for more than 50 years. In the past decades, CHTC Fong's devoted to the development of energy-saving and emission reduction machines and now it becomes the basic conditions for dyeing factories. Today, we live in a digital era, though in the traditional textile industry, CHTC Fong's has been with the times. Together with its well-known brands: Fong's, Monforts Fong's, Xorella, Then, Goller, FWT and Monforts, CHTC Fong's dedicated in the development of Smart Dyeing & Finishing and join with the customers to build the intelligent dyeing factory.

The CHTC FONG'S Group is proud to present the "one-stop" sustainable solution in dyeing and finishing range of "pre-treatment, dyeing, post-treatment and waste water treatment" at Shanghaitex

2019 in W1, A10 and yarn conditioning and heat setting in E1, A60, Shanghai New International Expo Center, Shanghai, China from Nov 25th to Nov 28th. CHTC FONG'S will exhibit a full line of the most advanced and innovative products and technology including our new product-FONG'S TECWIN High Temperature Dyeing Machine, FONG'S ALC Automatic Liquid Chemical Weighing and Dispensing System, GOLLER DYEPADDER ECONOMICA Nip-in-Trough, MONFORTS QUALITEX Full Touch Panel Control System, MONFORTS NEW CYD Continuous Yarn Dyeing System, MONFORTS FONG'S Innovative Technology Center and MONFONGS STRAHM HiPer Shrink Astra Shrinkage & Relaxation Dryer. In addition, CHTC FONG'S will also demonstrate the innovative smart dyeing and finishing at the booth.

FONG'S TECWIN: High Temperature Dyeing Machine

FONG'S TECWIN is designed to satisfy the ever-changing market demands. The reliability and versatility of the machine are improved.

TECWIN is equipped with several patented designs:

1. Combined Air and Front Spray Nozzle

- ❖ Standard Feature: Increase the degree of dye liquor interchange before passing through the main nozzle.
- ❖ Optional Feature: Optional blower is equipped. High pressure aerodynamic flow in spray nozzle is provided to resolve the special fabrics that demand high quality.

2. Automatic Adjustable Nozzle

Adjustment of nozzle setting is automatically done by means of motor drive system, and hence manual changing of nozzle is not required.

3. Liquor Dispersion Storage Chamber

This is a uniquely design chamber for providing a better liquor dispersion effect.

4. Upper and Lower Overflow

- ❖ Lower Overflow: Maintaining pump operation with low water level to prevent disturbance caused by rinsing at a high water level.
- ❖ Upper Overflow: This is adopted for conventional overflow rinsing function.

Furthermore, the dye liquor separa-



GOLLER DYEPADDER ECONOMICA: Nip-in-Trough with Double Impregnation Mechanism.

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The New GOLLER DYEPADDER ECONOMICA Nip-in-Trough with Double Impregnation Mechanism provides even dyeing for knitted fabric without crease mark and distortion incurred. The newly-designed double impregnation mechanism provides further improvement on the impregnation effectiveness in combination of a lower running tension. As the ECONOMICA guarantees reproducibility and handling in the highest standard, a smooth and clear fabric surface can be expected after dyeing.

The deflection-controlled rollers of ECONOMICA are working according to the principle of the swimming rollers, irrespective of the overall pressure of the paddler- the deflection of the squeezing rollers is always consistent with the set values to ensure an even dyeing over the fabric width. On top of the deflection-controlled rollers, the large diameter guide rollers ensure a smooth knitted fabric transport with minimal tension incurred, which is beneficial to the dyeing process as a whole. The double impregnation mechanism consists of a trough with a paddler inside and with the minimum level of working liquor required. This mechanism provides sufficient impregnation and low-tension running condition for knitted fabric during the dyeing process. Furthermore, Thermplates keep the temperature of the dye bath as per the set value throughout the dyeing process – no matter it's cool or hot.

With the precise dosing of dyestuff-alkali mixed, the application of precise and homogeneous pick-up and the linear nip of the deflection-controlled rollers, the GOLLER DYEPADDER ECONOMICA Nip-in-Trough with Double Impregnation Mechanism will always be the most ideal open-width dyeing range for knitted fabrics dyeing in small to medium batches used.◆



FONG'S ALC: Automatic Liquid Chemical Weighing and Dispensing System.



MONFONGS STRAHM HiPer Shrink Astra: Shrinkage & Relaxation Dryer

Monfongs Strahm is a Shrinkage & Relaxation Dryer for open width and tubular knit fabrics. Its unique design focuses on the highest drying capacity, low residual shrinkage and a soft hand feel by mechanical action inside the chambers. The uncompromising design also features an incorporated energy recovery system (EnRec 1&2) that saves energy consumption, particularly, when it is compared with standard common dryers in the market.

The relaxation dryer mainly includes infeed section, overfeed area, tumbling zone, and delivery section. It can also have an option to add the double padder configuration in the infeed section in order to give a more even pick-up to the fabrics. The width and the length of fabrics in the overfeed zone can be restored to its original state by the overfeeding and the stretching on the pin chain. Fabrics under low tension subsequently enter the wave maker zone of chambers.

The unique designed Energy saving and Recovery system is achieved by circulating the fresh air firstly in the last chamber and then travels against the fabric running direction. The design gives an advantage that less than half the amount of fresh air is needed to heat up to the drying temperature. That also means less than half heat and saturated air will be exhausted, which can reduce energy consumption and the operation cost.

tion is specially designed in TECWIN. With the use of the variable loading storage chamber, the dyeing operation can be performed more smoothly and fabric patterns can be more organized, which eventually leads to a lower liquor ratio.

FONG'S ALC: Automatic Liquid Chemical Weighing and Dispensing System

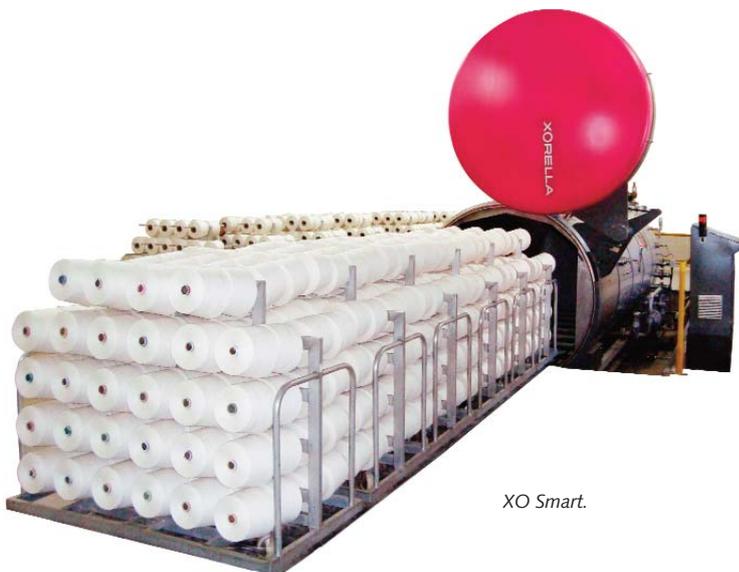
The ALC Automatic Liquid Chemical Weighing and Dispensing System realizes unmanned dispensing according to the instructions fed from the Enterprise Resource Planning (ERP) system using advanced computer control technology. By means of precision mass flow-meter and metering pump, the liquid chemicals are accurately and precisely delivered and weighed from storage tanks, and with the application of valves and pipe network connections, the chemicals are accurately and rapidly distributed to the designated dyeing machine in the most effective way.

With the efficient cleaning function after each delivery, not only is the operation efficiency of the dyeing plant improved but also it avoids human errors. Thus, dyeing quality is guaranteed.

XORELLA XO-Series: Vacuum Conditioning and Heat Setting Machine

XORELLA XO-Series energy saving vacuum conditioning and heat setting machines has been well used in improving the quality of yarn and also heat setting of garment. The Xorella XO-Steaming treatment could even penetrate the textile products for humidification, twist setting, preshrinking the synthetic filament, anti-static, colour fixation of digital printed fabric and heat setting of garment. The latest saturated steam generating system could reduce 30% of connected power loading and save between 15% to 25% energy consumption.

In order to satisfy the requirement of different users, Xorella provides both round and cubical machine and also variety of loading and door opening systems for customer selection. Nowadays, XO-Series machines were used in more than 50 countries in the world.



XO Smart.

FONG'S Water Recycling System

With global service for the dyeing and finishing industry, CHTC Fong's Group has focused on its principal business in design, research and manufacture of innovative and energy saving dyeing and finishing machines to help a sustainable balance between the industry development and environment protection. In recent years, Fong's has researched and developed the wastewater treatment technology, to achieve fully automatic operation water recycling system with dual-membrane processes, providing one-stop sustainable solutions of dyeing wastewater treatment especially for the dyeing and finishing industries.

Fong's Water Recycling System which can reuse any kind of qualified discharge water by using the most advanced and reliable dual-membrane processes (ultra-filtration system combined with reverse osmosis membrane system). The recycled water can be directly used for all dyeing processes after most of the mineral salts, calcium, magnesium hardness, Chroma, turbidity and COD composition are effectively removed from the waste water. The quality indicator of recycling water is superior to the normal tap water.

MONFORTS QUALITEX: Full Touch Panel Control System

China's textile manufacturers are facing the difficulty to find and retain trained machine operators, while operating in a highly competitive market where



FONG'S Water Recycling System.

optimised production and full resource efficiency are of paramount importance.

In direct response to this situation, A. Monforts Textilmaschinen GmbH & Co. KG has introduced a range of new Industry 4.0 technologies aimed at simplifying machine operation while providing easy access to all data and instant or remote assistance. (More details can be found on page No. 60-61)

MONFORTS FONG'S: Innovative Technology Center

Innovative Technology Center is a new research and development center for

exploring our innovation of the textile product application, which aims at improving the performance of equipment which is used for finishing processing in technical textiles. Meanwhile, it is a platform for machine demonstration and bulk trial of coating fabric samples for the customers.

In ITC, there is laboratory area, machine showing area, office area, storage room, and meeting room. Up to now, there is a coating line which is consisted of Montex 6500 stenter and Monforts Texcoat coating machine, and a Monfongs Strahm HiPer Shrink Astra dryer. ♦



Montex 6500 stenter.