

Fongs Group: Wide range of dyeing and finishing machinery

Fong's National Engineering Co., Ltd. (HK) and Fong's National Engineering (Shenzhen) Co., Ltd. will be present at ITMA ASIA + CITME at hall W5, stand B01 and will present following machines and technology for the interest of its customers.

JUMBOFLOW and JUMBOFLOW-SUPER High Temperature Dyeing Machine

Fong's National Engineering Company Limited has launched the JUMBOFLOW series - a high temperature dyeing machine, which is able to help dyehouses to dramatically lower productions costs and reduce energy consumption and effluent discharge. The Jumboflow machine can be operated at the lowest liquor ratio of 1:4.5, owing to its optimised structural design. The major design parameters and features of the machine are given as under:

Capacity	200kg/tube (HSJ-T20), 280kg/tube (HSJ-T28)
Liquor ratio	1:4.5
Fabric running speed	400m/min
VL Variable Loading Chamber	Able to change its profile to accommodate different types of fabrics
TIT Heat Exchange	Provides the highest heating rate with minimum heat loss to the environment
Dyeing fabrics	Large varieties of fabric types, from light to heavy textures

The Jumboflow machine is equipped with Multi Saving Rinsing System (MSR), which shortens the dye cycle and reduces water consumption. The Advanced Intelligent Rinsing System Plus (AIR+) controls the rinsing water consumption and shortens the rinsing process which leads to substantial machine output and ecological and economic benefits to the dyehouses.



Jumboflow High Temperature Dyeing Machine

ALLFIT-1 - Small batch dyeing machine

The ALLFIT-1 Small Batch Dyeing Machine is the best solution to find accurate recipe and process for the first batch of bulk production. It helps the dyehouses save the production cost and minimize unnecessary waste of expensive materials, dyestuff, chemicals and energy costs.

It is able to prepare sample fabric as little as 1 kg and suitable for the processing of knitted goods made from cotton and synthetic fiber and their blends. The dyeing recipes and process techniques developed from this machine can be directly applied to the bulk production. The low liquor ratio and power consumption ensures the dyeing quality and results.

The Plug & Run design enables the machine to run directly when connecting to water, compressed air, steam, electricity supply and drainage

The main features include highly efficient stainless steel circulation pump with frequency inverter drive ensures optimal dyeing liquor circulation. Lifter reel is driven by frequency inverter controlled motor; Service tank with dosing system and valve system; Highly efficient steam heat exchanger; and fuzzy logic temperature control software ensures accurate dyeing temperature control.

MicroWin - Mini sample yarn dyeing machine

In the textile yarn and thread dyeing industry, mini sample is often required by the customer for approval before bulk production. It is a customary practice to produce a coloured sample by taking a standard weight package.

MicroWin Mini Sample Yarn Dyeing Machine is an efficient machine to save expensive materials and process expenses. The machine is purposely designed to produce a coloured package with a weight in the range of 200-300 gram. The machine adapts the standard dye tube of inner diameter 48 mm and with a maximum winding outside diameter 95 mm. There is at least 75% of saving as compared to producing a coloured sample with a 1.2 kg package.

The main features are circulation pump with frequency inverter drive to effect inside-out and outside-in flow direction; Highly efficient jacket type cooler; Main control cabinet with FC28 program controller with fuzzy logic temperature control software; and Liquor ratio of 1:6 closely resembles in production machine.

Xorella: XO-Series vacuum conditioning & heat setting machine

Xorella's XO-Series energy saving vacuum conditioning and heat setting machines have been well received by customers since its launching. The new XO-series uses key components with excellent engineering in both performance and reliability to help the customers to save the energy consumption by 15-25%. Cornerstone of the new series is the advanced XO-steaming system, which uses the renowned intermediate vacuum technology and combines with internally produced 100% saturated steam to effectively condition, set, pre-shrinkage and relax the textile products.



XO-SMART Series is available in three standard sizes with latest features & XO-steaming system for low temperature applications.

From the standpoint of the customers, the Swiss designed XO-series machines incorporate the ecology concept to offer an low energy consumption and a simple design with minimum maintenance requirement to meet the lowest process cost and highest quality requirements. The operational efficiency is significantly improved by automatic loading platform.

Numerous XO-series machines have already been in operation in China, India Pakistan & other countries. Treatment vessels and pipings of new XO-series machines are made of high quality stainless steel.



XO-SELECT Series offer vast array of design options. Both cylindrical & cubical versions can be equipped with a variety of loading systems and door configurations. Temperature range from 50°C to 140°C can be chosen.

THEN-AIRFLOW™ - Piece dyeing technology

By replacing all liquor used only for propelling the fabric through the dyeing vessel by a recirculating air stream, patented THEN-AIRFLOW piece dyeing machines offer the shortest batch times and the lowest specific consumption of water, steam, electrical power and chemicals in the industry. Available in HT or LT (atmospheric) versions, THEN-AIRFLOW machines are the best selling brand in many Asian markets, such as China and Indonesia.

Compared with traditional hydraulic machines, THEN-AIRFLOW will typically offer you one batch more per day, save you 40% to 60% of fresh and discharge water volume, 30 to 50% of steam, and 15 to 20% in electrical power. In reactive dyeing, there are savings of 50 to 60% in chemicals.



THEN-AIRFLOW® SYN 600 G2 on display

THEN will exhibit their THEN-AIRFLOW SYNERGY 600 G2 high-temperature dyeing machine. This two-port machine has a practical loading capacity of 600 kg at a maximum rope length of 1,200 metres, and is suitable for woven and knitted fabrics made from cotton, viscose, polyester, polyamide and blends thereof. Such fabrics may contain up to 23% of spandex.

For the first time in Asia, a life-size image of the revolutionary THEN-AIRFLOW LOTUS long-tube machine will be shown, together with video coverage of industrial installations dyeing extremely sensitive fabrics from the automotive, technical and functional (sportswear, lingerie) sectors – some with up to 49% spandex.

LOTUS carries 21st century dyeing THEN-AIRFLOW technology into applications previously reserved for beam dyeing.



THEN-AIRFLOW® LOTUS

Goller: Pad Steam range for continuous dyeing of knitted fabrics

Continuous dyeing for knitted fabric always was impossible because there was no steamer available to handle the delicate mesh material. The steamer, however, is the most important module of the whole Pad Steam range. In the steamer the dyestuff has to be fixed on the fibre without damaging or deforming the delicate structure of the knitted fabric and without tailing or centre side variation. Goller now has developed a new continuous Pad Steam dyeing range for these kinds of fabrics.

The steamer as the most important component has been developed totally new with a unique design for this special technology. The entrance passage is adapted for the transport of the impregnated knit fabric into the steamer. The fabric is carried in tight strand form on guide rollers from the padder nip to the steaming zone through the steam lock. Sensible tension measuring load cells guarantee the almost tensionless transport. Thereafter, the fabric is handed over to big dimensioned transport rollers which are driven individually and likewise controlled by highly sensitive load cells.

Inside the steamer the fabric is not exposed to any stress through tension or slacks. During this stage of the process this is of high importance as the fabric in the steamer is wet from the dye liquor and additionally exposed to saturated steam. Through the sump heating an absolutely even steam atmosphere is guaranteed and the evenness of the dyeing result is secured.

The subsequent washing process where colour fastness, evenness and hand are finally defined is done on the well known Sintensa ranges. They combine tensionless fabric transport with excellent washing effect, essential for good soaping results and bulkiness of the washed, rinsed and neutralised fabric.

The Goller Pad Steam range for knitted goods guarantees optimal dyeing conditions during the whole passage through the range resulting in perfect dimension stability of the finished fabric. The dyeing results are accordingly outstanding and the dyed fabric shows highest quality, excellent fastnesses as well as soft and bulky hand being essential for a successfully selling fabric.

Most important for the textile industry, however, are the advantages of this new process technology. Besides reproducibility, quick results because of the continuous



Knitcolora Pad Steam dyeing range by Goller.

process and excellent fabric performance, the environmental aspects have to be considered. The continuous dyeing process of knits saves substantial amounts of precious water and energy. So it is absolutely in line with the efforts of Goller to minimize the usage of utilities for the benefit of the customer and last but not least the environment. This unique concept of the newly designed Knitcolora Pad Steam dyeing range can be seen at Goller's booth at the ITMA ASIA + CITME 2010 in Shanghai.

Stenter Frame Range-MONTEX 6500

As a joint venture between FONG'S Industries Group and A.Monforts Textilmaschinen GmbH & Co. KG, Monforts Fong's (Monfongs) has been known as a leader in textile finishing machinery. With technology back-up by A.Monforts in Germany and efficient production capacity in China, there are now more than a thousand MONFONGS stenter ranges in service for customers since venturing in China a decade ago. Other than the well-known MONFONGS 328/329 Stenter Frame Range, MONFONGS 828 ES Stenter Frame Range with Heat Recovery System, Relaxation Dryer, Continuous Dyeing Range, Shrinking Range, Beam Winder, etc. Various ranges are part of the manufacturing program. However, MONFONGS always stay at the frontier to innovation. In 2010, Monfongs has geared up for MONTEX 6500 stenter range production and sale in China after A.Monforts in Germany officially declared in Oct. 2009 that this model became available in China and S.E. Asia through Monfongs. Within the first month, Monfongs had received 9 sets confirmed order for MONTEX 6500 scheduled to be delivered before mid-2010. This top-of-the-line carries distinctive features by A.Monforts design after many years of striving for perfection such as faster range speed, integrated exhaust channel, heat current outflow adjustable nozzles and so on. ♦