



Mr. Hafeez-ur-Rehman Siddiqui,
Technical Director, Nishat Mills Ltd.

Debut for Monforts Thermex 5500 with Econtrol® process in Pakistan

Continuous reactive dyeing process on a new Monforts Thermex 5500 continuous dyeing system with an Econtrol® unit at Pakistan's Nishat Mills is thought to be the first in Pakistan.

Pakistan's Nishat Mills has taken delivery of a new, purpose-ordered, Monforts Thermex 5500 continuous dyeing process with an Econtrol® process system to introduce, it is thought, the country's first continuous reactive dyeing line.

According to Nishat Mills Technical Director, Hafeez-ur-Rehman Siddiqui, the company had recognised that the combination of Thermex 5500 and Econtrol® was proving extremely popular in India but the concept was new for Pakistan.

"There had to be a reason for its success. Although at this point we are still learning and evaluating as it has only been a few months since its installation.

"We are looking to meet our target of at least a million metres per month but

our decision to acquire the Thermex system was not only to increase production, but also to enhance quality and reproducibility.

"We also bought the Econtrol system to help us reduce the cost of production by reducing water consumption and controlling pollution as well," he added.

Nishat Mills Ltd

Nishat Mills Ltd was established in 1951 and is considered to be the flagship company of the Nishat Group. The company's dyeing and finishing plant, based in Lahore, initially processed home textiles.

"Today," said Hafeez-ur-Rehman Siddiqui, "we are working in three different sectors; home textiles, linen and bottom wear."

In addition to shirting, poplins, lawn fabrics and home textiles, the facility is also equipped to handle heavy weight fabrics such as twills, canvas and bottom

wear in addition to stretch fabrics in a variety of high density woven fabrics.

The company's fabric dyeing plant in Lahore was already equipped with Monforts stentering, sanforizing and other equipment, which have been complemented by the new Thermex and Econtrol® systems.

Continuous reactive dyeing

The Thermex 5500 continuous dyeing system along with the Econtrol® was ordered through local representative Al Ameen Trading.

"Since we had already been relying on Monforts technology dyeing, I felt that we should consider changing to continuous dyeing for bottom wear, narrow width dyeing – which accounts for 70% of our total dyeing capacity.



“Furthermore, with our Monforts experience we did not want to deviate from our existing range and configurations.

“We evaluated the various advantages of the Econrol® process to meet our specific quality parameters in processing bottom wear, narrow width, woven fabrics.

The main advantage of the Econrol® process, in addition to the energy savings, for Nishat, was the improved fabric specifications of dyed materials with, for example, rubbing and light fastness, when compared with other processes, according to Mr Siddiqui.

He went on to explain, “We expect better quality and fabric specifications, and are currently running 100% cotton.

“An impressive feature of the Thermex continuous dyeing with Econrol® is its energy savings,” he explained elaborating further, “The cost of utilities in Pakistan is very high; almost equal to the total cost of dyes and chemical consumption.

“The continuous process Econrol® is not only energy efficient but also offers ecological advantages of continuous finishing with a minimum use of chemicals.

“It is great that we can finish our fabrics with excellent light and washing fastness.

“Installing the Monforts Thermex 5500 with Econrol® was the right decision for us and will greatly contribute to meeting our target of 1 million metres of fabric per month,” he concluded.

Thermex 5500

The fully automatic processing unit is ideal for companies such as Nishat, who

strive for continuous quality management and low operating costs.

The Thermex 5500 range is the modern solution for the continuous dyeing and finishing, which is economical for dyeing both large and small batches.

The machine is also operationally reliable incorporating latest air flow technology and innovative process engineering.

High-speed batch changing is possible thanks to automatic cleaning and Teflon-coated rollers.

Thermex 5500 offers uniform air flow, temperature and fabric finish.

The air circulation fans in each Thermex unit are arranged symmetrically and designed to provide the perfect match for the various heating systems used in the processes of drying, thermosoling and curing.

Another important aspect is the fact that the lint filters can be removed from outside the machine for cleaning without interrupting production.

Before the air supplied by the two fans enters the jets, it passes through a flow junction chamber. The controlled removal of the waste air takes place through an exhaust duct leading out of the treatment chamber.

The circulation air is always uniformly heated no matter what the heating system employed. The heating chamber extends along the entire width of the machine.

The top transport rollers are driven via friction clutches - a drive system which keeps the fabric tension constant even when it undergoes dimensional change during drying or heat-setting.



Another feature of Thermex 5500 is the process control sensors. These sensors measure high moisture, liquor pick-up and distribution, processing temperature, residual moisture check, fabric temperature, air velocity and humidity of circulating air.

Nishat Group

With two spinning units and an existing Monforts yarn dyeing operation in Faisalabad, a weaving unit in Sheikhpura and weaving, fabric dyeing and finishing, stitching and garment making-up operations in Lahore, Nishat has grown over the years to become one of the biggest vertically-integrated textile operations in the country.

The company is now achieving export sales of over US\$400 million a year.

The fabric processing plant has the capacity to process over 10 million m of fabric monthly and has been purpose-designed to handle heavy weight fabrics such as twills, canvas and poplins, in addition to stretch fabrics in all high density weaves.

Nishat’s operations are also equipped with extremely efficient, captive co-generation, power plants to meet in-house energy requirements at all of its spinning, weaving, processing, stitching and apparel units.

It has been a satisfied Monforts customer since starting in house dyeing operations in 1989; following its formation in 1951. ♦

