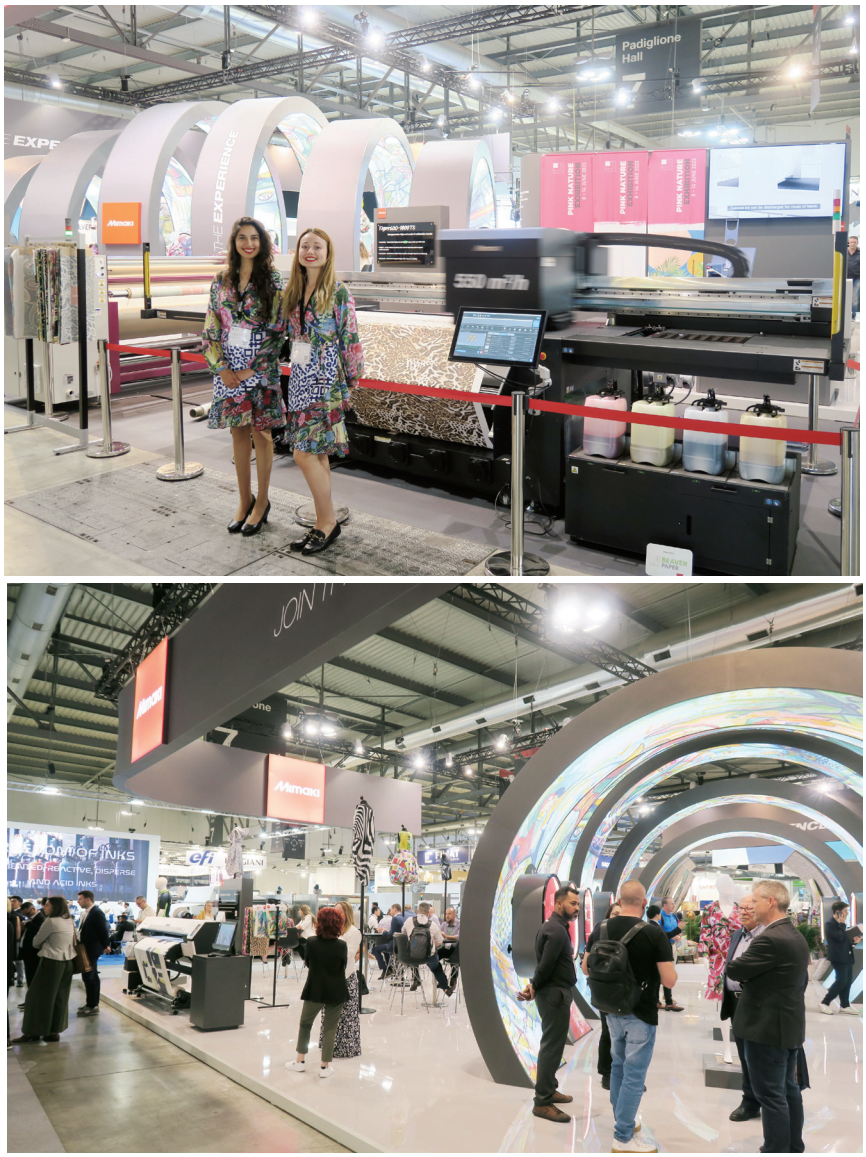
Mimaki's Drives Sustainable, Circular Textile Production Forward with New Innovations at ITMA

- Textile Pigment Transfer Printing System almost eliminates wastewater and dramatically streamlines workflows
- ITMA visitors the first to preview complete Transfer Printing System with new module for the Mimaki TS330-1600, new pigment inks and pioneering Texcol® paper
- Neo-Chromato Process, a world first in cyclical textile technology, allows re-use of previously dyed polyester textiles, eliminates need for incineration and reduces the energy consumption associated with recycling

Mimaki Europe, a leading provider of industrial inkjet printers, cutting plotters, and 3D printers, has announced the introduction of two revolutionary technologies at ITMA 2023: a Textile Pigment Transfer Printing System and the Neo-Chromato Process. These innovations are showcased for the first time, and ahead of commercial availability, at the exhibition in Milan, Italy, solidifying Mimaki's commitment to sustainable and environmentally friendly solutions in the textile printing industry.



The scenes of Mimaki's booth at ITMA in Milan, Italy

Introducing Mimaki's New Textile Pigment Transfer Printing System – addressing the need for eco-conscious textile printing

"Traditionally, the dyeing process for natural fibres generates an alarming amount of wastewater – around 2 billion tonnes every day in the pre- and post- dyeing processes worldwide(1) - and contributes greatly to CO2 emissions," said Arjen Evertse, General Manager Sales, Mimaki Europe. "In addition, the dyeing process is complicated in terms of equipment structure and process and often, overseas transportation of textile products from the main textile-producing countries also emits CO2. The Textile Pigment Transfer Printing System minimises water usage and simplifies the printing workflow. Additionally, its compact size and affordability allow small lot textile production to be implemented locally, leading to significantly reduced environmental impact."

The transfer printing method is more sustainable than both analogue and digital textile dye printing methods with zero water consumption and substantially lower CO2 emissions. The system, demonstrated on the Mimaki stand (H7-C304), comprises three essential elements: the Textile Pigment Ink, the Transfer System and the Textile Pigment Transfer paper, Texcol®.

Texcol® is a revolutionary transfer paper pioneered by Dutch paper manufacturer, Coldenhove that allows for transferring a digital print using an environmentally friendly 3-step transfer process to create a vibrant application on a wide range of materials, including natural fibres. The design is initially printed onto

the paper using a customised TS330-1600 - Mimaki's high-volume, high-quality dye sublimation printer - and Mimaki's new pigment inks developed for the process. The module that adapts the TS330-1600 will be available as an option for existing and new Mimaki customers in Q3 2023 but is being previewed on the Mimaki stand at ITMA, giving visitors to the show an exclusive preview into how this highly productive Mimaki printer can be transformed into Mimaki's most sustainable solution for apparel, house textiles, and soft signage yet.

Mimaki's new Textile Pigment Ink is undergoing bluesign certification before commercial availability. bluesign is a renowned certification programme that ensures the highest levels of safety, environmental friendliness, and sustainability within the textile and apparel industry.

As the final stage, the Texcol® paper undergoes a one-step waterless process, through an entry-level calendar machine onto the textile of choice.

Another Mimaki world first - Cyclical textile technology

Mimaki is also debuting its new, unique Neo-Chromato Process, which revolutionises the reuse of coloured polyester textiles.

Arjen continues, "The increasing awareness of sustainability has led to a significant disposal issue within the textile industry, with polyester textiles accounting for approximately 60% of 92 million tonnes of wasted textile materials worldwide. Of this enormous amount of polyester waste, currently around only 15% is recycled. Mimaki's Neo-Chromato Process tackles this issue head on by utilizing a discolouring technology for dye sublimation inks. This process not only eliminates the need for polyester waste incineration but also reduces the energy consumption associated with textile recycling."

By decolourising polyester textiles that have been dyed using dye sublimation technologies, this innovative process allows materials to be re-printed or dyed immediately, contributing to a smaller circular economy. There is no limit to how many times reused polyester can be treated with the Neo-Chromato Process and the process itself minimises water usage and pollution by enabling the disposal of the absorbent paper and decolouring solvents used in the process as burnable waste.

"It is the responsibility of everyone here at ITMA and within the wider textile industry to enable a more sustainable future. Mimaki is actively collaborating with retail and apparel brands to explore the full potential of our latest sustainable technologies. While these latest innovations will enable significant steps forward in sustainable textile production, we also continue to focus on bringing new innovations to market that support the pressing needs of our customers, designers, brands, and importantly, the planet," concludes Arjen.

The TS330-1600, Mimaki's high-volume and -quality dye sublimation printer, can print on Texcol® using the company brand-new pigment inks which were specially developed for this process.

Mimaki Launches Most Productive Tiger600-1800TS Dye Sublimation Printer to Boost Adoption of Digital Textile Printing

Mimaki Europe, a leading provider of industrial inkjet printers, cutting plotters, and 3D printers, is debuting the new Tiger600-1800TS, Mimaki's most productive sublimation transfer printer, on its stand (H7-C304) at ITMA 2023. This latest high-speed, compact and robust roll-to-roll inkjet printer has been designed to accelerate the analogue to digital transformation within the textile printing industry.

The Tiger600-1800TS boasts a maximum printing speed of 550 m2/h (143% faster than the previous model) owing to the renovated high-speed printhead and Mimaki's proprietary image quality enhancement technologies. The printer's size has also been halved compared to the previous system, with the paper mounting and winding system both located at the back of the machine. This smaller footprint enables customers to easily install multiple units to meet fluctuating demand, whilst also increasing overall production capacity.

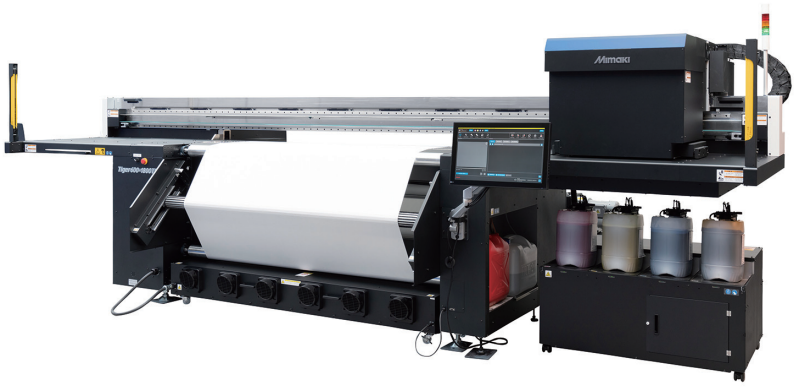
"All of these latest and innovative developments ideally position the Tiger600-1800TS to compete with analogue textile operations and support the move to digital print production," explained Arjen Evertse, General Manager Sales, Mimaki Europe. "The benefits of digital printing are wide-ranging compared to lengthy, complicated and unsustainable analogue production methods. Digital printing offers a seamless, cost-effective solution for producing smaller quantities that can be adjusted to

fit varying demand. It also enables greater design flexibility and reduces environmental impact by enabling local production, minimal inventories and therefore, wasted products, as well as completely cutting out the wastewater that results from the analogue process."

A further environmental benefit of the Tiger600-1800TS will be the imminent bluesign® certification of its MLSb510 series sublimation transfer inks. This certificate, expected to be awarded in June 2023, will provide assurance that these inks are of highest quality combined with due consideration for the safety of consumers and print operators, and environmental conservation, and therefore, contributing to the sustainability of the textile industry.

Mimaki's renowned expertise in developing reliable, easy-to-use and efficient solutions has also not faltered in the development of the Tiger600-1800TS. The printer's ink tanks can be replaced without interrupting the printing process, minimising down time. Maintenance of the printer is also reduced with its roller paper feeding method eliminating the need for the application of adhesives onto a belt.

"The Tiger600-1800TS captures the needs of our customers and prospects perfectly with all of its advanced engineering and practical, user-friendly features. We're confident this new addition to the Mimaki portfolio will further promote the shift to digital textile printing, thereby supporting this inspiring industry to be quicker to adapt to changing production requirements, whilst also being more environmentally conscious," Arjen concludes.



Mimaki's latest dye sublimation printer, the Tiger600-1800TS

Mimaki launches first direct to film inkjet printer

Mimaki expands their textile portfolio with the TxF150-75, a printer designed for high quality, customisable textile applications.

The TxF150-75, Mimaki's first DTF printing technology

With full colour capabilities, the TxF150-75 can create eye-catching graphics for textiles, such as t-shirts.

Mimaki, a leading manufacturer of inkjet printers and cutting systems, announces its first 'direct to film' (DTF) inkjet printer, the TxF150-75, at its Global Innovation Days event. Utilising a heat-based transfer method, the printer is ideal for creating premium, customised merchandising, sportswear and various other promotional textile applications. This is the latest entry from Mimaki for the decorated apparel segment and will be making its EMEA at-show debut at Printwear & Promotion Live! in the UK (26th-28th February 2023).

DTF printing provides an easy and affordable process for decorating apparel, most commonly T-shirts. The design is initially printed directly onto a special transfer film, which is then sprinkled with hot-melt powder. Once heated and dried, the transfer sheet is ready to be applied to the fabric using a heat press.

Based on Mimaki's existing 150 Series, one of its best-selling models, the new TxF150-75 responds to the market need for a reliable, stable DTF technology. Built-in ink circulation system and degassed ink pack design prevent common DTF issues, such as poor ink ejection and white ink clogging. These core technologies, which also include the nozzle check unit and nozzle recovery system, all ensure that processes are carried out efficiently with minimal intervention needed.

Mark Sollman, Sr. Product Manager EMEA, Mimaki Europe comments, "Apparel decoration is a hugely popular and dynamic sector, one which we are already operating in with our other textile technologies. However, we could see the impact DTF technology has had on the industry in recent years, with its significant advantages over existing technologies. Namely, DTF avoids the time intensive process of plate creation in screen printing and the required weeding in traditional vinyl heat transfer. The technology can also create vibrant designs with its full colour printing capabilities. We're excited to bring a solution to the market that is designed for those already active in the decorated apparel sector and those looking to enter it, which excels in usability, reliability and quality."

As the company's first entry into a new segment, Mimaki has created its own range of water-based pigment inks (PHT50) especially for this solution. As of March 2023, these inks are OEKO-TEX® ECO PASSPORT certified , guaranteeing safety and environmental standards are met in line with Mimaki's sustainability pledges. Unlike sublimation heat transfer printing, DTF is much more versatile when it comes to materials, able to work with more than just polyester and TC blended (polyester blended) materials, and on light or dark coloured fabrics.

The printer also comes with Mimaki's RasterLink7 RIP software, allowing users to have full oversight and the ability to streamline the process from the design to the final product. Like with all Mimaki technologies, buyers can expect extensive in-house support from Mimaki throughout the initial set-up and use.

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