



## MS PRINTING SOLUTIONS & JK GROUP (DII)

### DIGITAL PIGMENT PRINTING: KEEP IT SIMPLE

Is Pigment, really, the future of digital textile printing or it will never get off the ground?

TITAS 2023 is the chance, for MS PRINTING SOLUTIONS and JK GROUP to show directly to attendees the innovative yet sustainable drive of our Pigment Solution. Overall interest in pigment has been rising more and more, such involvement has confirmed that pigment is the trend to believe in.

MS & JK digital pigment printing solution simplifies the digital textile printing process, lowering remarkably the printing stage's carbon footprint. It is the perfect choice for sustainability, consumers, and workers because it is an easy and waterless process that does not require pre- and post-treatment, allowing a sustainable and cost-effective production chain.

What makes MS and JK's Pigment printing Solution unparalleled:

- **Print on demand.** The shorter and in-line process lets you print when, what, and where you want, limiting over-production and waste and shortening the time-to-market, halving the production printing steps.
- **Zero pre- and post-treatment.** The patent-pending formulation overpasses the most common ink profile and the need for any in-line or successive-step treatments. This useful and non-obvious formulation makes the inks patentable and unique.
- **Sustainable printing process.** Digital pigment printing reduces environmental impact by an average of 95% compared to the digital reactive printing process. [1] That's the result of the study we commissioned to a third-party company on the comparison, in terms of environmental assessment, of two textile digital printing technologies: digital printing with reactive and pigment inks. The study also highlights the reduction of the hydric resource environmental impact by using digital pigment printing is more than 85%.
- **Saving more water.** We did more by adding to the JP7 machine a zero-wastewater recirculation system, which controls and reduces the water used to clean the belt. The system uses a fixed amount of water in a fixed nr° of washing cycles, becoming 25 times more efficient. The tests showed a consumption of 3,75l/h instead of 100l/h without the system.
- **Color Yield increase.** The system includes new software for color calibration that in combination with the other system components allows an increase up to 20% in color yield and a reduction of the calibration time up to 50%.
- **An innovative ad-hoc system for digital textile printing.** It integrates dedicated solutions designed accordingly to the textile customers' requirements, matching the proper mechanical and fluid flow

functioning and performing the best efficacy of the system. That's possible thanks to the heritage and deep knowledge in digital textile printing we can count on in our divisions.

If you need more information, please visit our websites: [www.msitaly.com](http://www.msitaly.com) - [www.j-k-group.com](http://www.j-k-group.com)

[1] vs digital reactive process, environmental study developed by NEXT TECHNOLOGY TECNOTESSILE srl Società Nazionale di Ricerca Tecnologica. Following ISO 14040 "Principles and Framework (practice, application, limits)" e ISO 14044 "Requirements and Guidelines (preparation, management, critical review).