

SUMMARY

Digital inkjet printing in textile industry

Developed by:



UNIVERSITY
OF BORÅS



1. Background

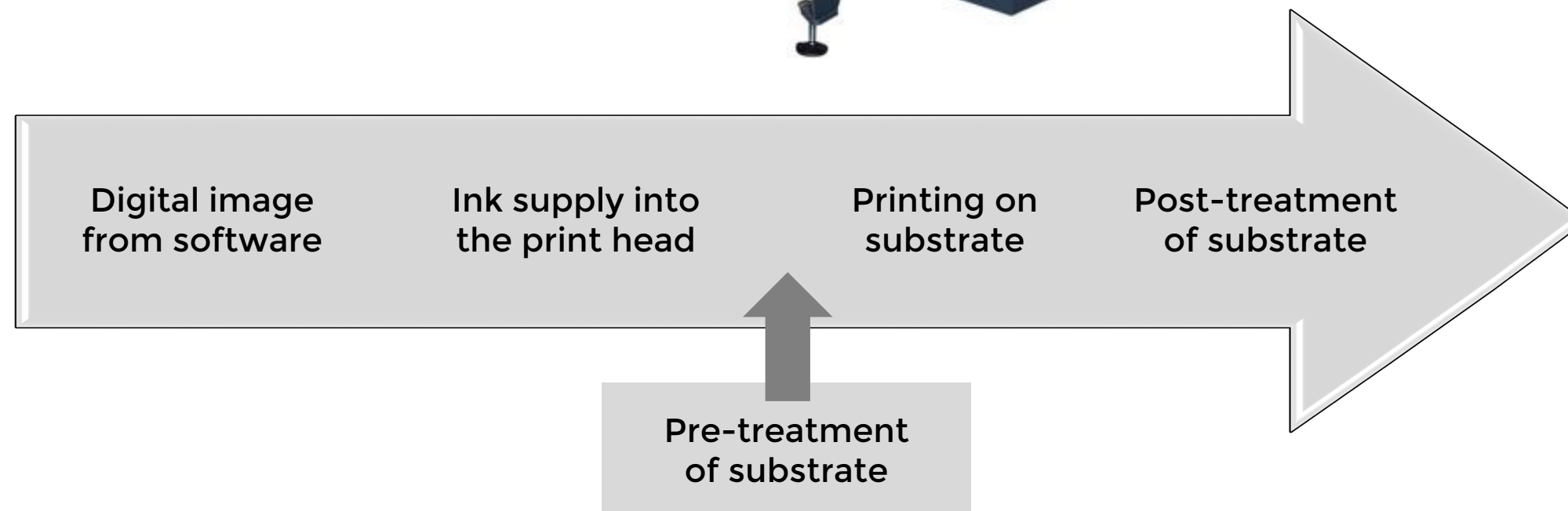
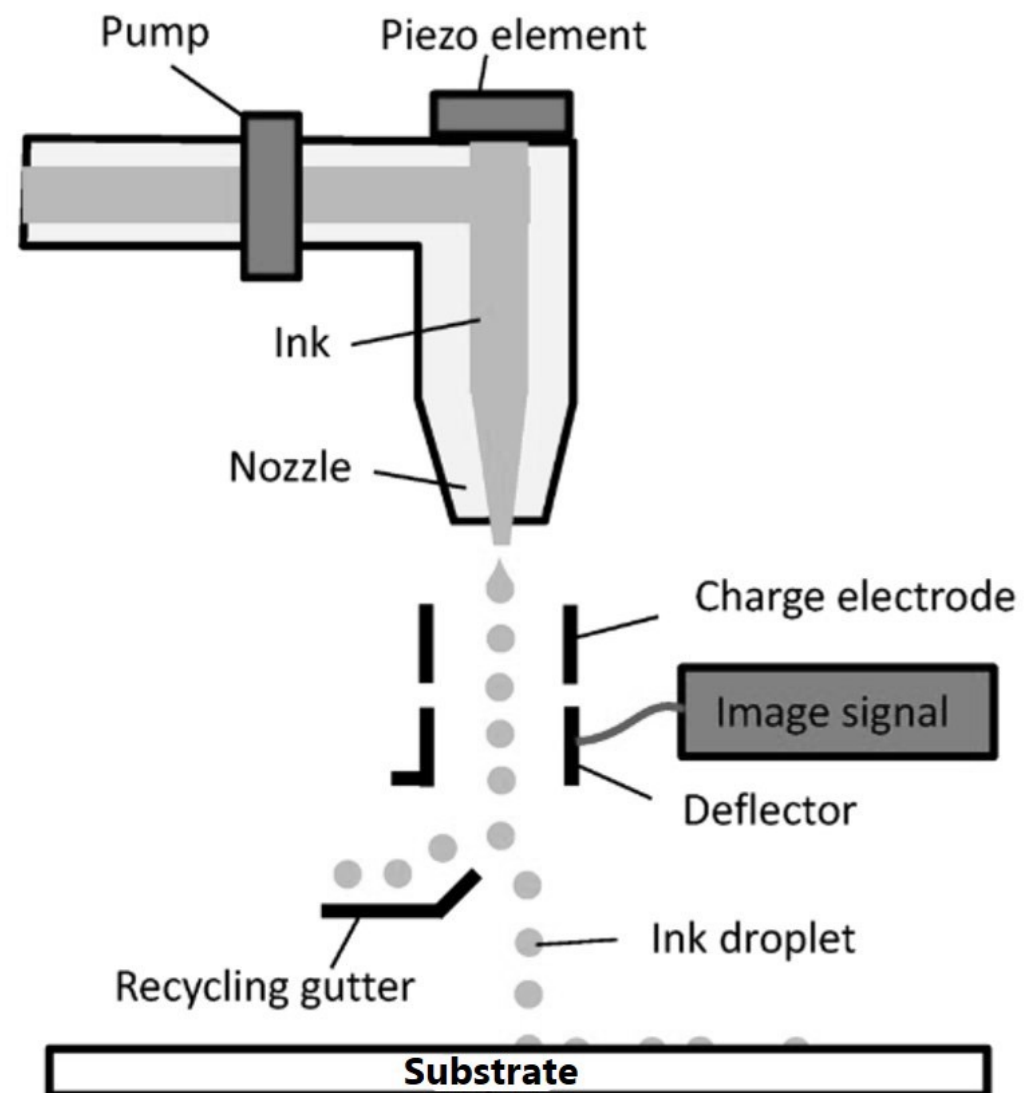


Image: MIMAKI TX400-1800B

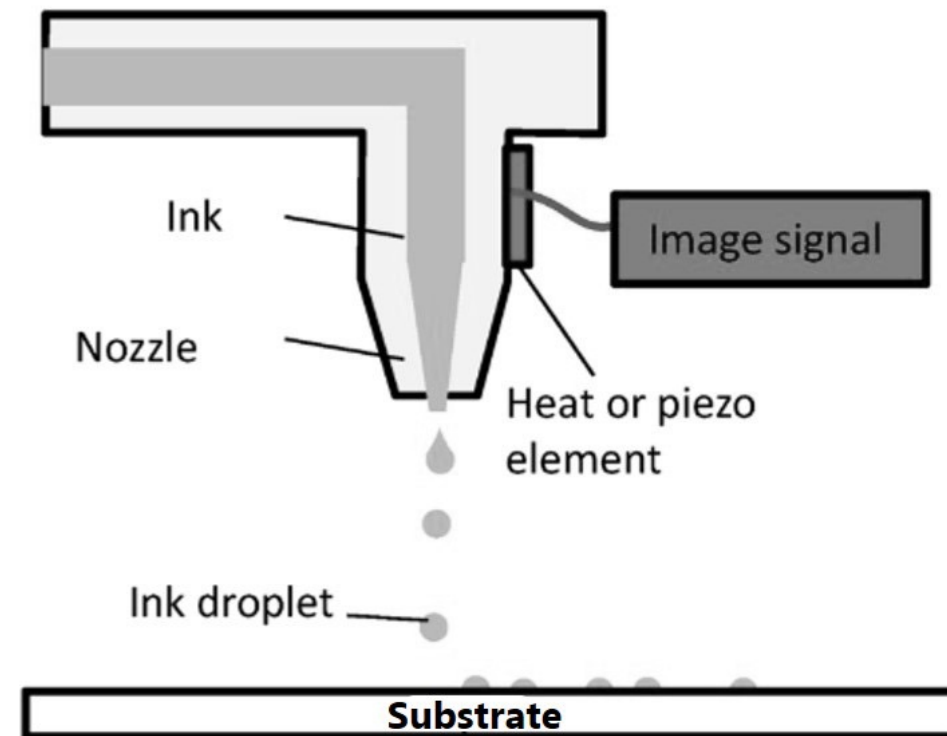
<https://www.signupdate.co.uk/Sign-News/mimaki-tx400-1800b>

2. Main inkjet printing systems

Continuous systems



Drop-on-demand systems

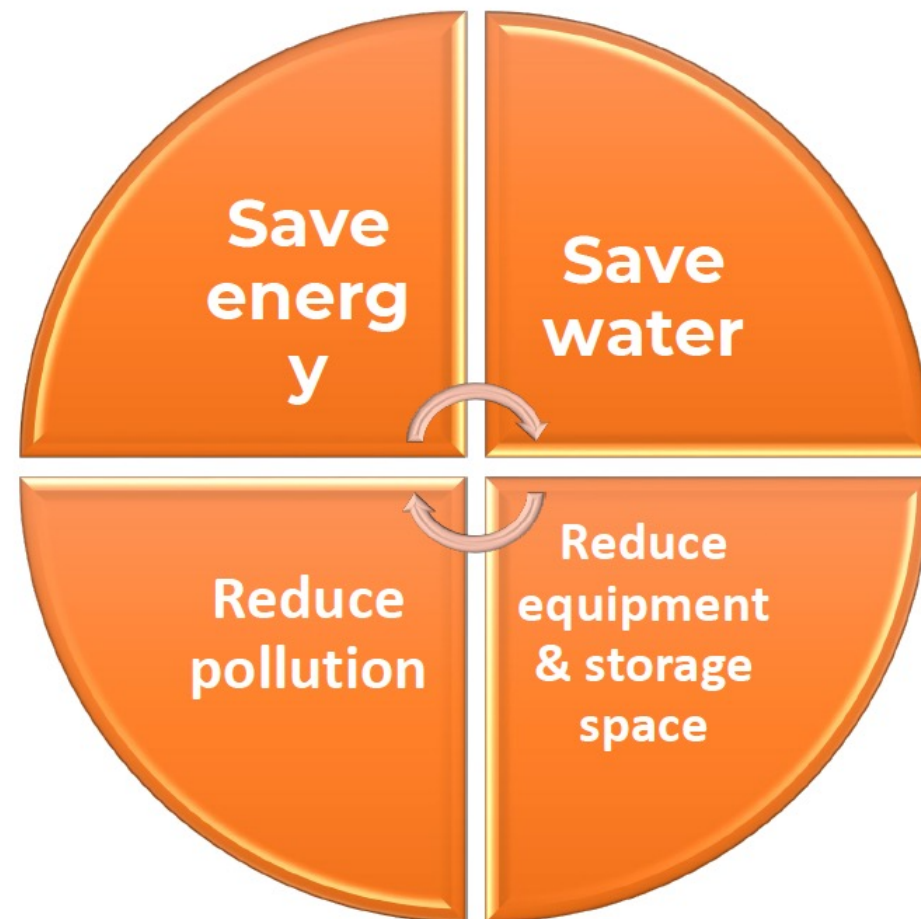


Reproduced from
(Lau et al. 2017)

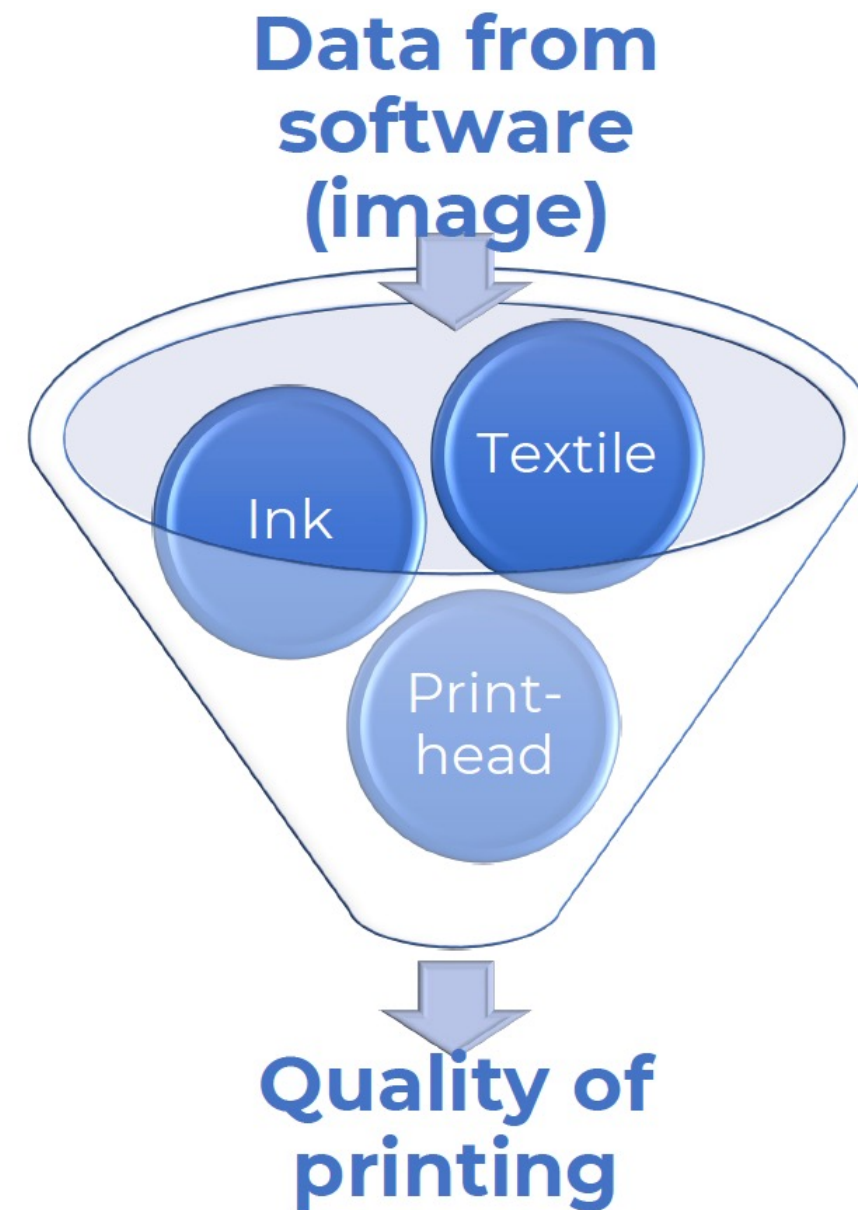
2. Lau, Gih Keong, and Milan Shrestha. 2017. "Ink-Jet Printing of Micro-Electro-Mechanical Systems (MEMS)." *Micromachines* 8 (6): 1-19. doi:10.3390/mi8060194.

3. Characteristics and components of DIJ printing on textiles

Compared to conventional printing



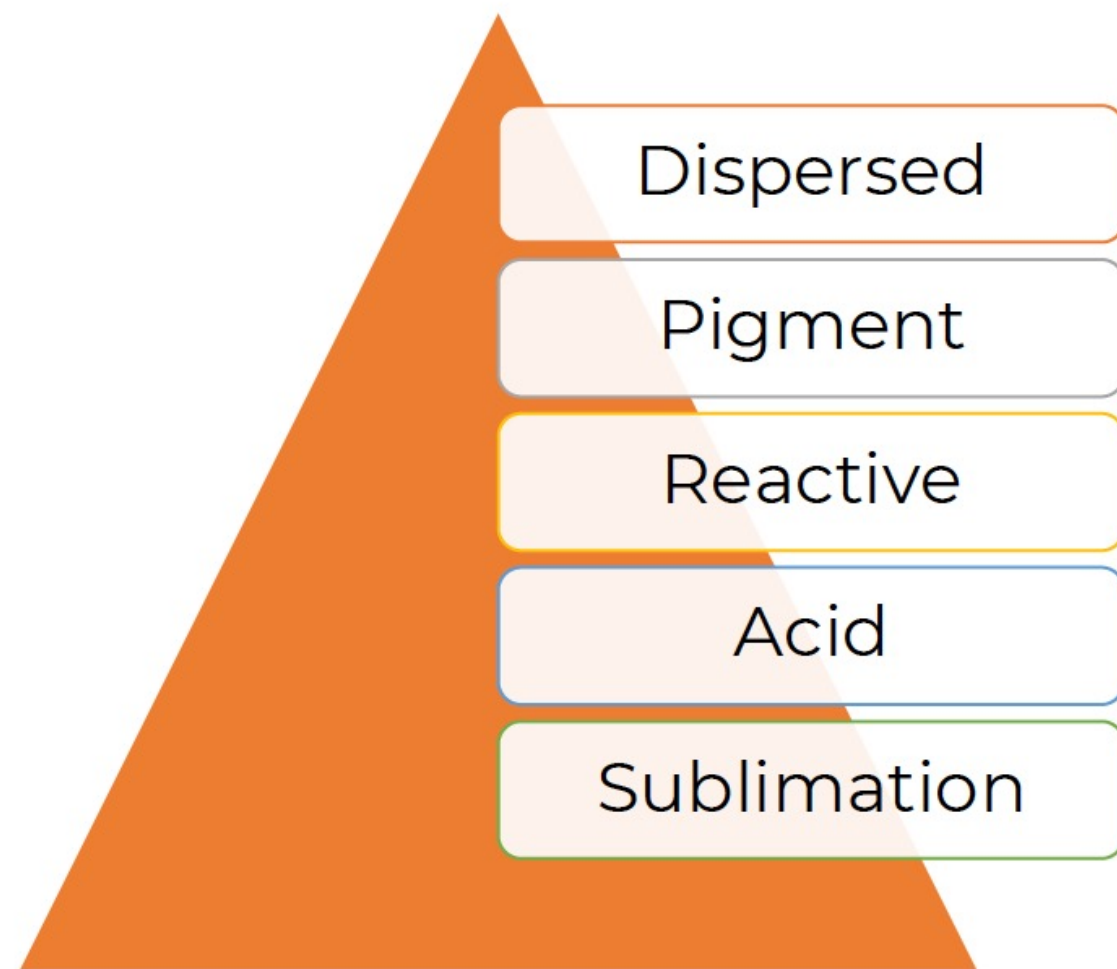
Compatibility is KEY!



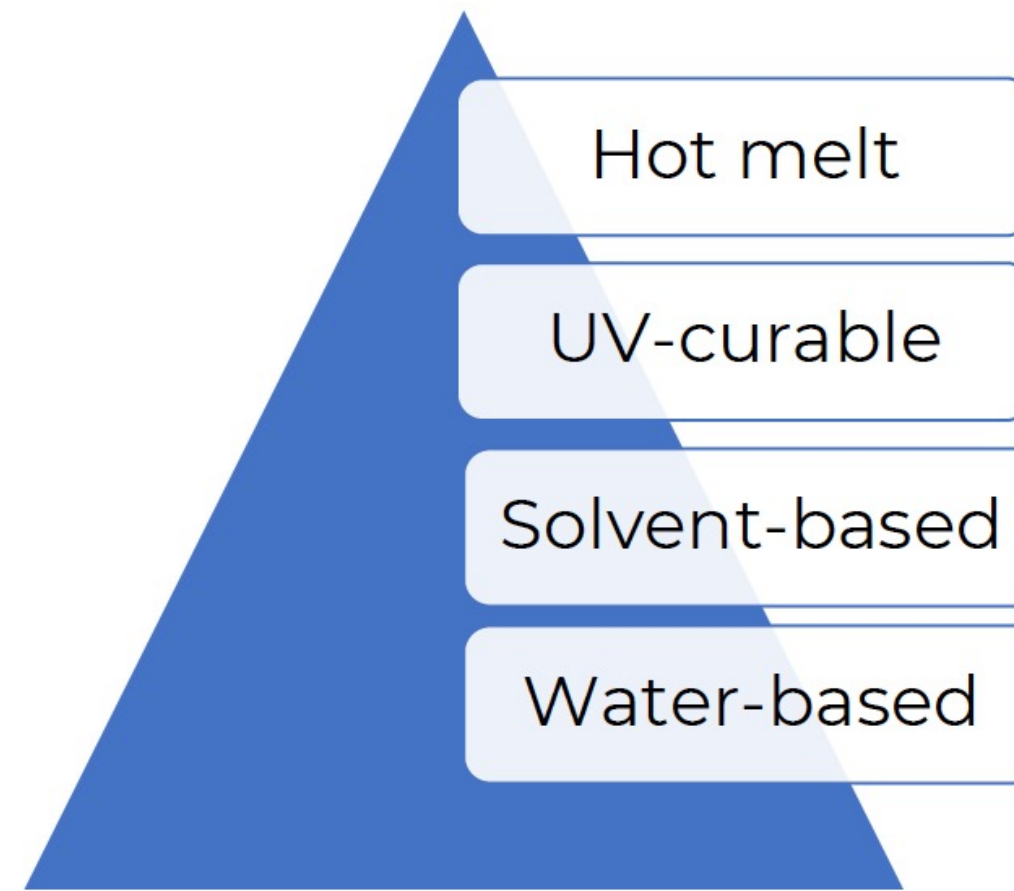
3. Magdassi, Shlomo, ed. 2009. The Chemistry of Inkjet Inks. World Scientific. doi:<https://doi.org/10.1142/6869>.

4. Main ink types

Pre and/or post-treatments may be required!



According to colorant type



According to the base used

4. Tawiah, BENJAMIN, EBENEZER K. Howard, and BENJAMIN K. Asinyo. 2016. "The Chemistry of Inkjet Inks for Digital Textile Printing - Review." International Journal of Management, Information Technology and Engineering 4 (5): 61-78.

5. Applications of digital inkjet printing on textiles



Fashion and domestic textile

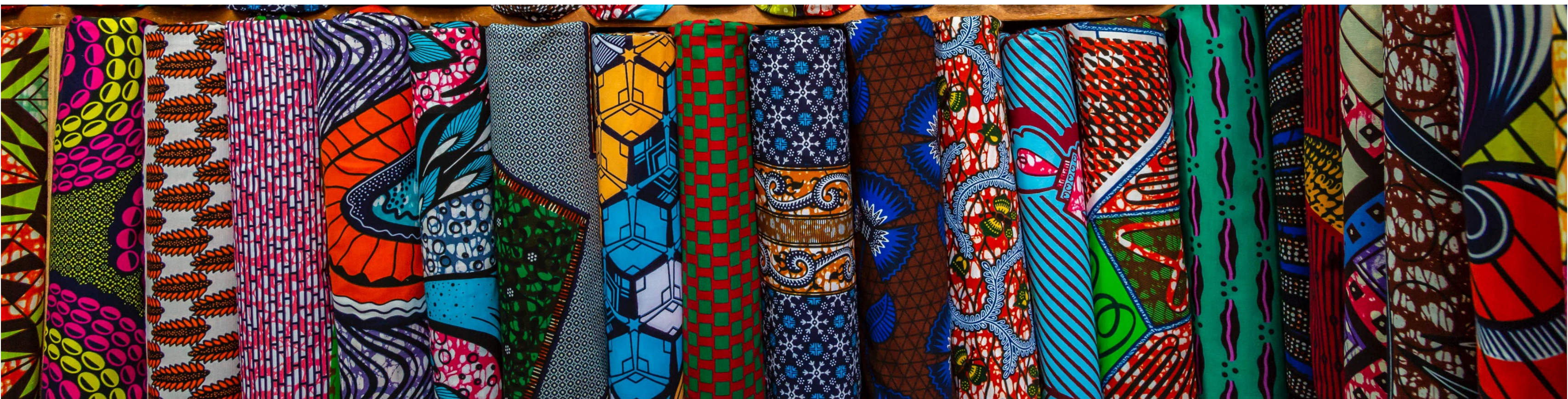


Functional textiles



Industrial and sportive

This was a summary of an open educational resource. Please visit <http://destexproject.eu/> to see the full amount of intellectual outputs of the project.



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