Textile Sublimation: Direct vs. Transfer

There are two different methods to digitally print textile: directly printing to textile or with the use of transfer paper. There are pros and cons to both processes. To determine which method to use, consider how the print will need to perform in its final application using the following tips and tricks.

Printing to transfer paper helps give better control over dot gain immediately after the ink is jetted. There is less dot gain on transfer paper than on fibrous textiles. Better control over dot gain helps with edge definition and gives a high quality appearance for closely viewed images. Applications best suited for transfer printing include pop-up displays and in-store displays.

When printing direct to textile, the ink is jetted directly onto the textile and then sublimated. This process allows the imagery to penetrate to the second side of the fabric, resulting in a “see through” appearance. Wind socks that you commonly see on roadsides by banks, gas stations and mobile phone stores, for example, are often produced using the direct to textile printing process.

Textiles intended for direct printing are manufactured with coatings to assist in controlling the ink as it is applied. The stronger the coating, the better the control of the ink. Sometimes the coating can inhibit some of the dye from migrating completely to the second side. At close viewing, it’s possible to see the apparent density difference or looser edge definition. From a distance, however, these appearances can be negligible.
There are many different textiles available for direct to print and transfer paper sublimation printing. Contact material vendors and inform them of the final application to help you get started in the right direction. The right tools for the job is key — test several materials to find those that work best for the final application.

Notice the edge of the black picture box — this flag material is directly printed and intended for distance viewing applications.