Decorating Guide

ComfortWash
from the makers of Hanes®

Customizing t-shirts has never been easier or more popular, in part due to the many different types of printing methods that can be applied to a tee as well as the wide selection of tees and fabric contents available. Some of the most common blends include 100% cotton, cotton and polyester blends and 100% polyester. Each of these tee blends has its benefits and limitations when it comes to which printing methods work best.

DTG PRINTING, DIRECT-TO-GARMENT, is where ink is applied directly to a garment through a specialized inkjet printer. The digital artwork is sent directly to the printer, enabling single garment prints or small production runs without having to clean up inks or screens between jobs. The best tees for DTG printing are 100% cotton, which will give you the greatest results coming off the machine and after multiple washes.

HEAT TRANSFER VINYL PRINTING, HTV PRINTING, uses a specialty vinyl polymer with an adhesive backing that is applied to garments with a heat press. The vinyl is available in small sheets or large rolls and is cut into the shape of what will be applied to the garment. There are many vinyl transfers available that work on all types of fabrics, depending on the heat setting. Low heat applications are ideal for polyester tees, and higher heat applications will work best on 100% cotton.

SUBLIMATION is a dye transfer process where an image using dyes has been printed onto a specialty paper or plastic sheet that will then be used to transfer the image to a garment through a heat press machine. The heat press activates the dyes and changes them from a solid to a gas, which bonds with polyester fibers. These dyes will only permanently bond with polyester, so for best results use white 100% polyester tees.

SCREEN PRINTING is achieved by squeezing ink through mesh screens allowing color to pass through open areas creating the design. Different inks each have their own temperature requirements for curing which allows for printing on all types of fabrics. 100% cotton tees are the most popular choice due to high curing temperatures and minimal quality issues. When screen printing on cotton blends and 100% polyester tees, special care should be given because of the heat sensitivity of synthetic fibers. Some inks even have stretch and recovery characteristics specially designed for high-performance polyester garments.

DTF PRINTING, DIRECT-TO-FILM, is a new printing method that combines features of DTG printing and heat transfers. The image is printed on a clear polyester film by machines, much like a DTG inkjet printer, and then transferred to apparel by a heat press. Because it combines inks and application, DTF printing can be applied to all types of fabrics. DTF offers vibrant colors and strong colorfastness after laundering. Plus the polyester film graphic can be stored and quickly applied to any tee, which is beneficial for repeat orders that require print-on-demand or fast turnaround.

GENERAL GUIDELINES & TIPS

Whenever possible, sample the design with a pre-production sample to ensure the quality and performance of the garment and decorating material, including washing some samples after printing to check on durability, adherence and dye migration. Maintaining your dryer's temperature is also important, because proper temperature is critical for curing inks as well as avoiding damaged garments.

POLYESTER HEAT SENSITIVITY

Polyester fabrics are more sensitive to heat than cotton fabrics and are prone to shrink and become damaged when subjected to extreme heat. To properly screen print on polyester, be sure to manage your heat setting during the curing process to avoid excessive shrinkage, dye migration and scorching. It is best to monitor the surface temperature of the garment with a thermo-probe, and follow the ink manufacturer's print parameters.

DYE MIGRATION

Temperatures needed to cure screen printing inks or apply heat transfers may also convert some of the dyes in the polyester into a gas, changing its original shade. To avoid this, use inks or transfers that are bleed resistant. Since dye migration can appear instantly or take several hours to manifest, it's advisable to wait 24 hours before shipping if you are unfamiliar with the garment, inks or transfers.

GHOSTING

Ghosting is when a printed image is transferred to another shirt stacked on top of it before it has fully cured and cooled down. Ghosting could also be the result of not using a cover sheet on the heat press, which helps prevent ink from accidently being transferred from one garment to another. To avoid ghosting, allow shirts to fully cool before stacking or packing and use a cover sheet.

Fabric Guide

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	SCREEN PRINTING	DTG PRINTING	HEAT TRANSFERS	EMBROIDERY	SUBLIMATION
TEES					
Short Sleeve Tees **100% garment dyed ring spun cotton** GDH11B | GDH100 | GDH125 | GDH150 | GDH175 | CW100	✓	✓	✓	✓	✗
Long Sleeve Tees **100% garment dyed ring spun cotton** GDH200 | GDH250 | GDH275 | GDH280	✓	✓	✓	✓	✗
Tanks **100% garment dyed ring spun cotton** GDH300	✓	✓	✓	✓	✗
SWEATS					
Crew Sweatshirt **80% U.S. grown ring spun cotton / 20% polyester /** **100% ring spun cotton face for optimal embellishment** GDH400 | GDH475 | GDH490	✓	✓	✓	✓	✗
Hoodie **80% U.S. grown ring spun cotton / 20% polyester /** **100% ring spun cotton face for optimal embellishment** GDH450	✓	✓	✓	✓	✗
Pullover Quarter Zip Sweatshirt **80% U.S. grown ring spun cotton / 20% polyester /** **100% ring spun cotton face for optimal embellishment** GDH425	✓	✓	✓	✓	✗

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