

**Welcome to the wonderful world of crafting!** Are you just getting started and not sure what all of these new crafty terms mean or how to tell the difference between your materials, and how to use them?

Don't worry, we have you covered! We have compiled this blog to help provide you with all of the information you need to get started!

There is a lot of information here and it might be a little overwhelming or confusing with all of the different terms and materials, feel free to reference it anytime you need to or come back to it if it gets to be a bit too much at once.

## What are the different decorating techniques?

Adhesive Vinyl is pressure sensitive and for use on solid surfaces. It is tacky and will have a paper backing. It is used on solid, smooth, non-porous blanks, such as mugs, tumblers and glass.

**Heat Transfer Vinyl (HTV)** is for use on fabrics and some hard surfaces. It is applied with heat by using a heat press, hand press or home iron. It most often comes with a clear or frosted *carrier sheet.* The HTV itself will **not** be tacky. It may also be referred to as iron on vinyl.

**DTF Transfers** are heat applied, full color, ready to press transfers. They do not require weeding.

**UV DTF Transfers (Coming to 143Vinyl in Spring of 2024)** are pressure sensitive, full color, ready to apply transfers. They do not require weeding, they come with "transfer tape" already on them as they are printed directly on to film.

**Sublimation Transfers** are heat applied to polyester blanks or those with a high polyester content. This printing process does not include white. Any white in the design is provided by the blank being used.

**Printable Vinyl** can be used with your inkjet printer to create stickers that can be applied to solid, non-porous surfaces such as mugs, tumblers, and wood.

**Printable Transfers** can be used with your inkjet printer, and applied to fabric, and other non-porous substrates such as fabric, shirts and tote bags.

### What is Adhesive Vinyl, how do I use it, and what can I put it on?

Adhesive Vinyl can be used on many hard surfaces such as glass, plastic, wood, stainless steel, ceramic and so much more. While you can apply vinyl to a multitude of surfaces, the perfect surface is something solid, shiny and smooth. Glass is the most ideal surface as it meets all of these. The farther away you get from this ideal surface, there is more probability that you will see issues of vinyl not adhering properly or not lasting as long.

Adhesive vinyl will feel tacky and have a paper backing. The backing might be white, or it could be printed with the manufacturer's name and/or logo.

There are two types of Adhesive Vinyl, permanent vinyl and removable vinyl.

**Permanent Vinyl,** such as <u>StarCraft HD</u>, generally has a life-span of 5 or more years and can be used for outdoor projects such as car decals, yard signs or holiday decorations and signs. You can also use it on stainless steel tumblers, ceramic coffee mugs and glassware.

In most cases, vinyl is *not* dishwasher safe. The heat from the water/dry cycles on dishwashers can cause the vinyl to peel off. The only dishwasher safe vinyl at this time is the Siser EasyPSV Starling, which you can purchase by clicking here.

**Removable Vinyl,** such as <u>StarCraft SD</u>, has a water-based adhesive and is intended to be temporarily used outdoors, but most commonly on indoor projects like wall decals, seasonal window displays and other home decor. When used indoors, removable vinyl has a life-span of 3 or more years and has a greater chance of being removed from painted walls without damage. When using it for indoor wall decals, it is best if the paint is water based, to prevent damage when taking the vinyl off.

When sending your adhesive vinyl to be cut, you will place the paper backing on your mat with the color or pattern facing *upwards*. Once your design is cut, you will weed away the negative areas (the areas that are not part of the design such as the inside of letters).

After you weed your design, place transfer tape over the design and burnish with a squeegee gently over the design, flip it over and burnish gently on the paper backing and then slowly remove the paper backing. The sticky side is applied to your surface and burnished firmly with a squeegee or <u>vinyl ball</u>.

Adhesive vinyl is not forgiving, meaning, once it is down, you can't peel it back up and place it back down. You would have to cut and weed your design again. You can use different tricks,

such as using parchment paper or the hinge method to help you place your design without it sticking to your surface prematurely.

Once your design is in place and it has been burnished to the surface well, you will slowly and gently remove your transfer tape and voilà, your project is done!

The cut settings for Adhesive vinyl may vary between different types, brands and the life of the blade on your machine. It is *always* recommended to do a test cut before committing to **your full project to eliminate waste.** (If your machine does not already come with a test cut option, you can use a 1" star design).

You can always refer to the product description or the printable Cutter Settings Document located by <u>clicking here</u>.

### What do I need to cut adhesive or removable vinyl?

- Your cutting machine (Cricut, Silhouette, StarCraft Solo, Siser, Brother)
- Cutting mat (Optional on some machines)
- Adhesive vinyl
- Transfer tape
- Weeding tool
- Squeegee
- Scissors
- Paper slicer (optional)
- SVG file
- Blanks to decorate (also called substrates), such as a coffee mug or tumbler

### What is HTV, how do I use it and what can I put it on?

HTV stands for Heat Transfer Vinyl. You may also see it called "iron-on" vinyl. These names are interchangeable, and some brands use one or the other when naming or discussing their products. Rest assured, whether you see HTV, heat transfer vinyl or iron on vinyl - it is all the same thing.

HTV, or iron-on vinyl, is vinyl that has a heat-activated adhesive. This is the reason you need an iron, hand held press or heat press. The heat and pressure will activate the adhesive and adhere the HTV to your material, most commonly fabrics. You will use HTV when you are making products such as t-shirts, tote bags and pillow cases.

The type of fabric used is important to know and understand. Materials such as 100% cotton, 100% polyester or a blend of cotton and polyester are generally used when using heat transfer vinyl.

HTV comes in solid colors, patterns and a variety of other options. It is important to note that not all brands have a carrier sheet already attached to patterned HTV. A transfer mask would be needed when there is not a carrier sheet attached.

When cutting HTV, in <u>most</u> cases, you will put the carrier sheet face **down** on your mat and **mirror** your image. Some carrier sheets will come clear and glossy (<u>StarCraft SoftFlex</u> and <u>Siser EasyWeed</u>) and some will come frosted (<u>Siser EasyPuff</u>) so it is important to determine which side has the carrier sheet. If you are unsure, simply take your weeding tool of choice and peel a small corner of your HTV sheet to reveal the carrier. If it is tacky, it is not HTV and it is most likely adhesive vinyl.

After you have cut your design, use your weeding tool to remove the negative areas of your design (the areas that are not part of the design, such as the inside of letters). From there, place your design so that the adhesive side of the carrier sheet is on your garment and your design is facing upwards, correctly. Then use your heat source (home iron, hand press or heat press) at the appropriate time, temperature and pressure settings to activate the adhesive to adhere to the garment.

When using a home iron, be sure not to use steam. The steam holes also do not produce heat, so you will need to pick up and place your iron back down on each area to ensure a good press. You don't want to "iron" the HTV as the movement can cause the vinyl to shift. When using a hand press or home iron, please ensure that the proper pressure is applied to get a good adhesion.

Cut settings for HTV can vary between types and brands. It is *always* recommended to do a **test cut before committing to your full project to eliminate waste.** (If your machine does not already come with a test cut option, you can use a 1" star design) You can always refer to the product description or the printable Cutter Settings Document located by <u>clicking here</u>.

## What do I need to cut and apply HTV?

- Your cutting machine (Cricut, Silhouette, StarCraft Solo, Siser, Brother)
- Cutting mat (Optional on some machines)
- Heat Transfer Vinyl (HTV)
- Heat mask (depending on the type of HTV being used)
- Heat tape (optional)
- Weeding tool
- Scissors
- Paper slicer (optional)
- SVG file
- Blanks to decorate (also called substrates), such as a t-shirt or tote bag
- Heat source (heat press, home iron, hand press)

### What are Direct to Film Transfers (DTF), where do I get them, and how do I use them?

Direct to Film Transfers, also known as DTF, are full color designs that are printed onto a special film using specialty ink. Unlike sublimation, DTF printers can print using white ink. In fact, white ink is used to cover the entire back of your design when the transfers print. The white ink does not become part of your design, instead it helps keep your design visible on darker colored substrates without dye-migration. The transfers are then coated with a special powder and set with heat. When you receive your printed transfer, all you have to do is press it onto your substrate. There is no weeding involved!

We have an easy to use Layout Designer (<u>143Vinyl Layout Designer</u>) where you can create your own designs using images and elements from our library, or upload your own images and elements to create amazing transfers. When uploading your design into the Layout Designer on our site, you must ensure that the image is an SVG or PNG with a transparent background and at least 300 pixels per inch (3000 pixels for a 10" x 10" design). If an image is uploaded with a background, that background will also print. To see if your image has a background, it is best to view the image against a dark background if it is a lighter image and a light background if it is a dark image. To remove a background from an image, we highly suggest using Photoshop. For a free, easy to use website, we suggest <u>PhotoPea</u>.

Direct to Film Transfers can be pressed on a variety of mediums from cotton, blended fabrics, denim, leather, wood, canvas, and more. They give a very professional look at a fraction of the price!

We have some layout designer tips on our website created by our DTF team and tutorials are often shared in our Facebook group, also from our DTF team.

Layout Designer Tips 143Vinyl Facebook Group

#### How do I press Direct to Film Transfers?

Although a hand press or home iron can be used, a heat press is recommended for the best results. The first thing you will do before pressing your transfer is to pre-press your garment for about 20 seconds to remove wrinkles and moisture. Position your transfer where you want it on your substrate. You can use heat tape to keep it in place. Press the transfer at 329 degrees for 20 seconds with medium to firm pressure *without* a heat resistant sheet or butcher paper. Allow the transfer to completely cool before slowly removing the carrier film. It is best to remove the item from your press so that it can cool faster. Once you have slowly removed the film, press for an additional 20 seconds *without* a heat resistant sheet or butcher paper.

## What do I need to apply DTF Transfers?

- DTF Transfers from 143Vinyl
- Heat source (heat press, home iron, hand press)
- Heat resistant tape (optional)
- Blanks fabric or other porous material

# What are UV Direct to Film Transfers (UV DTF), where do I get them, and how do I use them?

**Coming to 143Vinyl in Spring 2024**, UV DTF Transfers are pressure sensitive, full color, ready to press transfers. They are applied in a similar way as adhesive vinyl, but provide full color, like our DTF transfers! Your uploaded image is printed for you by 143Vinyl. Once received, it is applied with a squeegee to mugs, tumblers, wood, and other smooth, non-porous surfaces.

This section will be updated to include all of the details once this product is launched!

Stay tuned for more information on this exciting decoration technique!

### What is Sublimation?

Sublimation is the process of turning a solid into a gas. When heated, the ink becomes a gas and is transferred to your sublimation substrate. Sublimation requires special blanks that have a high polyester count, or a polyester coating. You can find some <u>here</u>.

Sublimation requires a dedicated printer, that is only for sublimation. It does not use the same kind of ink as a regular printer. You can either use a printer already intended for Sublimation like the Sawgrass SG1000 or convert an Inkjet Printer like the Epson ST-C2100 or Epson ST-8000 by filling the tank or special cartridges with <u>Sublimation Ink</u> instead of using the inkjet ink that comes in the box with the printer.

When you print your design on your sublimation printer, you will print the image *mirrored* on <u>Sublimation Paper</u>. Place the image side of the Sublimation Paper onto the Sublimation blank and secure with <u>heat tape</u>. Cover your design with butcher paper. If you are using a hard surface blank, put butcher paper on top of the blank, below the blank and around it to catch any blowout ink. Regular copy paper can be used if necessary.

Sublimation blanks can press at varying temperatures and times, so it is best to refer to the product description of the item you are using for this information. Using a home iron or a small hand press is not recommended when pressing sublimation transfers. It is best if the image is pressed all at one time to prevent ghosting or shifting of the image.

## What do I need to apply Sublimation Transfers?

- Sublimation transfers
- Heat source (heat press, 9x9 or larger hand press)
- Butcher paper
- Heat resistant tape
- White polyester t-shirts or poly-coated sublimation blanks

## What is the difference between DTF and Sublimation?

**Sublimation is great for anything white polyester.** For example, Sublimation requires a white or very light colored polyester t-shirt. Mugs, tumblers, and wood must be treated with a white polyester coating to accept a Sublimation transfer.

**Sublimation does not print white.** The white substrate (t-shirt, mug) fills in all white areas of a design. Sublimation ink actually dyes the substrate. There is no adhesive backing. It's printed, cured and pressed. With the right printer and ink, Sublimation is an easy add to your craft room.

**DTF is full color.** It is perfect for any color and any fabric. DTF prints white. That means white backgrounds must be removed for your transfer to be transparent. Ink used for DTF is thicker than other inks. This makes maintaining and operating a DTF print operation a lot more challenging than other types of printing. For this reason, DTF printers are not recommended for at home use.

**DTF prints the colors first, and then a layer of white directly on top of the color.** Once printed, a layer of adhesive powder is applied, then the transfer must be heated to cure the powder. It's very time consuming! Save time, frustration and money by ordering DTF Transfers. Just press your transfers on your shirts, and done!

### What do DTF and Sublimation have in common?

Both DTF and Sublimation are heat applied, and both require a crisp, clean, high quality image that is sized correctly for the dimensions of the transfer.

A 300 x 300 pixel image will print crystal clear at 1"x1". If you want a 12" x 12" transfer, you need to design your image at 3600 x 3600 pixels. So, 300 pixels per inch of design is needed for a good quality transfer. Don't just stretch a small image; your quality will suffer! Pixels need to be added to increase the size of the design. This process is called "upscaling", and it requires the assistance of an AI (Artificial Intelligence) program. 143Vinyl recommends <u>Upscaler - Pixelcut</u> as a FREE and easy upscaler.

File type is also important! PNGs and SVGs are best for printing. Both support a transparent background, and both provide "lossless" quality. We recommend <u>Photopea</u> for designing and editing PNGs, and <u>InkScape</u> for designing and editing SVGs. Both of these programs are FREE and awesome!

## What is the difference between StarCraft Inkjet Printable Vinyl and Printable Transfers?

<u>StarCraft Inkjet Printable Vinyl</u> and <u>Printable Transfers</u> are innovative and easy to use with your standard Inkjet desktop printer. You will use the print and cut feature (it could be worded differently with each machine brand) with your machine to get precise cuts around your images. It is recommended to use PNG images without a background.

**Printable Vinyl** - Is a permanent adhesive that you can use on a variety of solid surfaces or use as stickers. If your project will be exposed to water or several hours of sunlight, it is recommended to use <u>UV Laminate</u> on top of the design for longevity.

**Light Material Transfers** - Are a clear polymer transfer where you *will* need to mirror your image. You can use a pair of scissors to cut around your design after it has been printed, or you can use the print and cut feature to cut completely through both the polymer and backing to get a more precise outline. There is *no weeding* your design. Simply place the image onto your garment and press. It is *highly recommended* to use a heat press as the polymer needs very firm pressure to embed itself into the fibers of the fabric. This material is best used with white or light gray colors. Since the polymer is clear, it will pick up the colors of the fabric and can change the look of your design.

**Dark Material Transfers** - Have a white background to ensure colors stay as-is on any color or pattern fabric. You will *not* mirror your design and use the print then cut feature on your machine to get a precise cut around your design. You will then remove the excess and use a heat transfer mask to remove it from the paper backing. It is recommended to use a weeding tool or spatula tool to gently go around the edge of your design to make transferring easier. Then you can place your design on your project and press.

### What is the difference between DTF and DTV?

**DTF (Direct to Film) Transfers** are full color designs that are printed onto a special film using specialty ink. Unlike sublimation, DTF printers can print using white ink. White ink is used to cover the back of your design. The white ink does not become part of your design, instead it helps keep your design visible on darker colored substrates without dye-migration. The transfers are then coated with a special powder and set with heat. When you receive your printed transfer, all you have to do is press it onto your substrate.

**DTV (Direct to Vinyl)** is a vinyl product by Siser to use with your regular inkjet printer. You print and cut as you normally would, but you weed it to remove the negative areas. This product is opaque. You will print your design *not mirrored* and after you have cut it, you then weed your design and use a heat transfer mask to lift your design from the backing and place on your garment to press.

## What are the differences between weeding tools?

Weeding tools are an essential part of crafting and we offer a wide range of options to fit your personal needs such as the <u>PinPen</u>, <u>Stab-n-Grab Tweezers</u>, <u>Siser EasyWeeder</u> and <u>Siser Tweezers</u>.

**PinPen**: This tool is a fan favorite as it is comfortable like a writing pen. It has a sharp pin to grab the unwanted areas of your adhesive vinyl and HTV. It is best to use this tool at a 40 degree angle and store in the felt sleeve it comes in or in a Tool Holder. The PinPen is available in a variety of colors to match your craft room!

**Stab-n-Grab Tweezers**: These stainless steel tweezers are ideal for weeding smaller, more intricate details such as mandalas. The stab-n-grab tweezers are available in a variety of colors to match your craft room!

**Siser EasyWeeder**: This tool has a very sharp point that is hooked for easily pulling out the pieces of your design that you do not need. This tool has a rubber grip, making it comfortable and easy to use.

**Siser Tweezers**: These tweezers are curved with sharp points, ideal for grabbing and pulling away any excess from your design. This tool has a rubber grip, making it comfortable and easy to use.

If you would like more in-depth information, you can check out our YouTube tutorials on these tools by <u>clicking here</u> and shop for all of these amazing tools by <u>clicking here</u>.

## What is the difference between Transfer Tape, Heat Tape and Heat Transfer Mask?

<u>Transfer Tape</u> is used with adhesive vinyl to remove your design from the backing and transfer it onto the surface of your project. Transfer Tape *cannot* be used with a heat source.

<u>Heat Tape</u> is most commonly used with sublimation transfers to tape down the design onto the surface to help prevent ghosting or the image from shifting. It can also be used with DTF and HTV if you need your design to have a little more security when pressing.

<u>Heat Transfer Mask</u> is essentially the carrier sheet to HTV, without the HTV itself. This is offered separately as it is sometimes needed for printed pattern HTV. It can be used with <u>Inkjet</u> <u>Printables</u> for Dark Materials and <u>Siser EasyDTV</u> to remove the design away from the backing and press onto the garment.



- Adhesive Vinyl Self adhesive material with pressure sensitive adhesive backing.
- Attach Hold your objects in relative position to each other. (Common Cricut term)
- **Burnish** Giving pressure and movement using a Squeegee tool to Transfer Tape over Vinyl or Heat Transfer Mask over a Print and Cut design.
- CanvasWorkspace Software for the Brother Scan and Cut machine.
- **Carrier Sheet** A clear adhesive film used to transfer your heat transfer vinyl design to your substrate. Depending on the type of HTV, most carrier sheets are attached to the heat transfer vinyl. Can also be called a transfer mask.
- **Color Swatch Ring** Sample of each color of a particular type of vinyl so that you always have the actual color on hand to determine which color you need to order for your projects.
- **Compound Path** Where more than one line combines as a single object and inner lines are embedded into the image.
- **Convert to Path** Most commonly used in Silhouette Studio and InkScape to take typed text and mimic any shape or design.
- Create The software used with the Starcraft Solo machine.
- **Design Space** The software used with Cricut machines.
- **Die Cut** Cuts all the way through your materials. An example would be cutting a design out of cardstock for a card.

- DPI Stands for "Dots Per Inch" and another way to determine an image's resolution. For example, 300 dpi means that every inch has 300 dots of ink per inch. 300 dpi is a great start for higher quality images and is recommended for Direct to Film Transfers and other print then cut projects.
- **DTF Transfers** Heat applied, full color, ready to press transfers for fabric and other porous surfaces. (See UV DTF for pressure sensitive transfers for tumblers, mugs, and other non-porous surfaces.)
- **DXF File** Stands for "Drawing Exchange Format" and is a type of Vector file. This file is what can be used with the Basic Edition of Silhouette Studio for Silhouette cutting machines.
- **Flatten** Converts multiple layers to a single layer and removes the inner cut lines. Most commonly used when creating an offset to make stickers so that the machine only cuts the offset and not the design itself. (Common Cricut term)
- **Ghosting** When a sublimation transfer/image shifts when pressing and creates a second lighter image.
- **Group** Keeps multiple objects together to resize evenly or move around your software canvas together. (Common Cricut term)
- Heat Transfer Vinyl Heat activated adhesive. Also called iron on vinyl.
- **Inset** Is where there is a smaller, evenly distributed layer generated in front of your design.
- Iron on Vinyl Heat activated adhesive. Also called HTV (heat transfer vinyl).
- Kern Is adjusting the character spacing, most commonly used with script fonts to connect each letter as a fluid word.
- **Kiss cut** Does not cut all the way through your material. An example would be only cutting the printable vinyl, not all the way through to the backing, for stickers.
- **Layering** Piecing together multiple colors or patterns to create a design. Layering can mean placing colors or patterns on top of each other, or next to each other to create one full design.
- **Mirror** is when you reverse your image. It appears backwards when cut or printed. It is most commonly used when using heat transfer vinyl and sublimation.

- **Offset** Also known as "Stroke" or "Shadow Layer" where there is a larger, evenly distributed layer generated behind your design. This is commonly used when creating stickers or another layer to use with Printed Pattern materials. (Common Cricut term)
- **PNG** Stands for "Portable Network Graphics" and mostly used with the Print then Cut feature with your cutting machine. You want to use PNGs without a background so that your machine and software will cut around the image and not around the background.
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- **Pressing Pillow** Used when you are pressing items with zippers, seams, etc so that you get a good even press.
- **Print then Cut** A feature using registration marks in your machine's software to print your design and your machine will read the registration marks to cut printed images. Mostly commonly used to make stickers or with printable transfers. (Common Cricut term)
- **Release Compound Path** Taking a single object and releasing it to show inner lines that are able to be deleted.
- **Reverse Weeding** Another form of weeding adhesive vinyl. This can be done by adding transfer tape over the entire cut area, removing the background and then weeding the excess off of the transfer tape, similar to how you weed HTV. Or by applying the entirety of the cut area to the surface of a project, then removing the excess.
- Silhouette Studio The software used for Silhouette machines.
- **Slice** Also known as "Crop" or "Knockout" that allows you to layer two overlapping images and essentially cut out the top layer into the back layer to create a new design.
- **Sublimation** is the process of turning a solid into a gas. When heated, the ink becomes a gas and is transferred to your sublimation substrate.
- **Subtract** Removes shapes from the bottom layer of any group of objects that are selected.
- **SVG** Stands for "Scalable Vector Graphic" and is the most commonly used cut file for the hobby crafter. These files will automatically import as cut lines for your design software of choice.
- Squeegee Tool used to apply adhesive vinyl to surfaces.
- **Test Cut** Performing a test of your current settings with the loaded material to ensure that the material is cut correctly and how you want it.

- **Transfer Mask** A clear adhesive film used to transfer your heat transfer vinyl design to your substrate. It is most commonly used for patterned heat transfer vinyl and some printable transfers. Could also be a called carrier sheet.
- **Trim** Means to remove unused transparent pixels from an image to ensure the design is the desired size. Could also be referred to as removing dead space around an image.
- **Ungroup** Releasing multiple objects from one to multiple. (Common Cricut term)
- **UV DTF Transfers** Pressure sensitive, full color, ready to apply transfers for tumblers, mugs, and other non-porous surfaces.(See DTF for heat applied, full color, ready to press transfers for fabric and other porous surfaces.)
- **Vinyl Ball** Firm rubber ball commonly used to help adhere adhesive vinyl to textured surfaces.
- Weeding The removal of excess material in a design.
- Weld Also known as "Union", where two individual objects become one. This is most commonly used with script fonts after the letters have been kerned. (Common Cricut term)