APPLICATION TIPS

STAHLS®

CAD CUT HEAT TRANSFER MATERIALS

www.stahls.com/heat-transfer-material

Introduction

This application tip will explain the laser marking and cutting process with Stahls' CAD-CUT® heat transfer materials. Using laser technology dramatically increases the level of detail you can achieve with heat transfer materials, and in most cases it completely eliminates weeding. Stahls' CAD-CUT® materials are PVC-free, laser-friendly and child-safe. Use heat transfer materials with a laser system to customize a variety of apparel including sports jerseys, T-shirts, performance apparel, bags, jackets, and more!

Overview

Stahls' CAD CUT heat transfer materials are available in many different styles and color options.

Thermo-FILM®	3M™ Scotchlite™ 5807	Reflective
Fashion-FILM®	Neon	Thermo-GRIP®
Premium Plus™	Glitter	GORILLA GRIP® II
SportFilm Lite™	Fashion-REFLECT™	Super Film™
FLOCK	Glow	ECONOPRINT®
Fashion-FILM® Electric	Glaze	AirFlow™
Glitter Flake™	Hologram	Pebble Puff®
		Thermo-FLOCK®

Necessary Options and Accessories

Cutting Table
1-Touch Laser photo Software.

Need to know

Not all materials or colors will work well with all processes. Glitter material may not be suitable for photo imaging, and certain film colors may not show well on light-colored fabric, engraved areas may show "shadowing." Due to the variety of colors and material types, testing is recommended before beginning any kind of production.

Processes in tip sheet

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STAHLS® LASER MARKING PROCESS
*Process works with: Fashion-FILM®, Fashion-FILMÂ® Electric, Glow, Premium Plus™ and SportFilm Lite™*

1. Design graphic to for engraving Stahls' Cad Cut® materials, Invert and Mirror image, placing a red cut line.
*Note: The laser will remove all the black color retaining the white to be heat applied.*
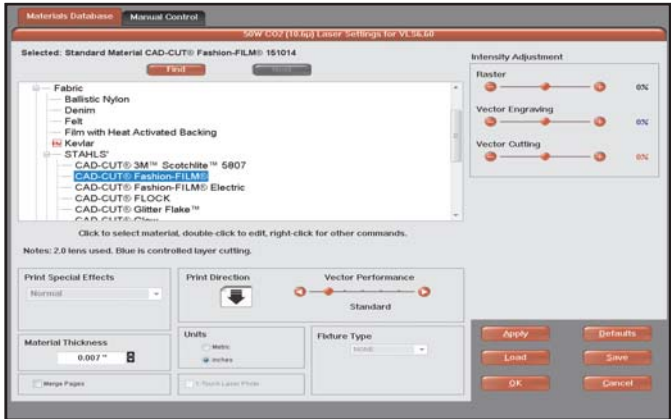
2. Print file to ULS laser system. Select Stahls' material from the ULS database by choosing "Fabric/Stahls." Then select the desired material.
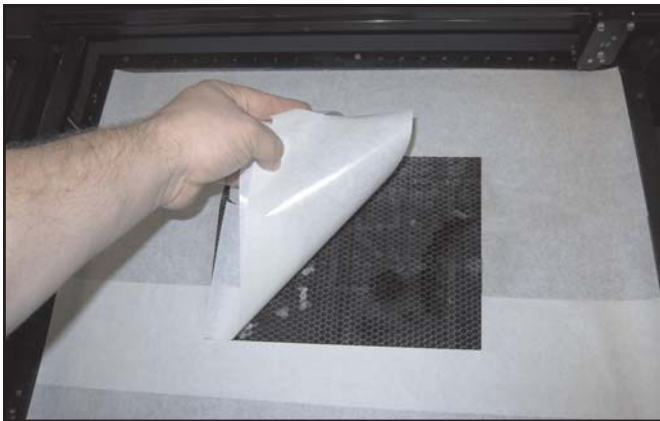
3. Use Downdraft Cutting Table accessory. Cover cutting table with adhesived-backed paper to increase vacuum effect. Use the laser to cut out location where the material is placed.
Note: The upper exhaust may all need to be covered in order to increase the vacuum on the table.
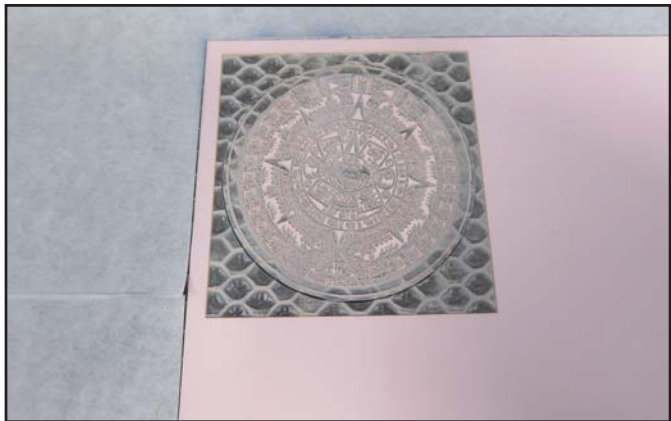
4. Using the vacuum to hold the material down, start file to engrave and cut the material with the laser system.

Note: Engraving residue will not effect the transfer.

5. Remove the engraved material from laser. Turn it over, engaving face down, and place on the garment. Then heat press using suggested Stahls' settings. Remove from heat press and hot/warm peel.

6. Finished result, no weeding

Note: Not all colors and materials will work with this process. Some film color/fabric combinations may show "shadowing" in engraved areas.

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STAHLS: LASER PHOTO PROCESS (Not all colors are suited to this process)

Process works with: Fashion-FILM®, Fashion-FILM® Electric, Glow, Premium PlusTM and SportFilm LiteTM

1. Select any digital photo or image to be placed on apparel.

2. Open digital image in 1-Touch Laser Photo. Crop/size the image to desired size, then mirror image. Next select the Stahls' CAD-CUT *"dark"* or *"light"* filter.
Note: Dark will invert the image, Light will not invert
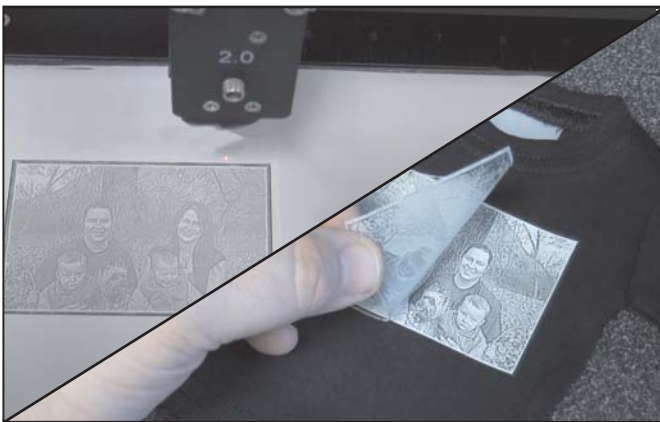

3. Save filtered image. Next open that image in the design software. Place a black box behind photo and a red cut line where image will be cut out.
Note: A normal filtered image will appear as a coarse
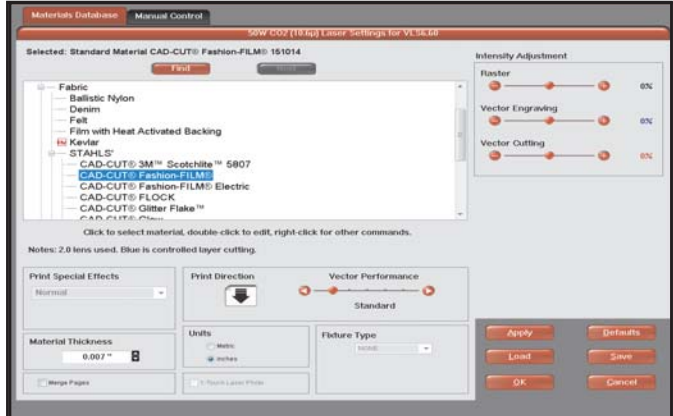
4. Print file to Universal laser system, and select Stahls' material from the ULS database. Choose *"Fabric/Stahls"* and select desired material.

5. Engrave and cut image with laser. Heat apply image and warm/hot peel carrier film (backing).
Note: Use vacuum table to process material shown on Page 2

6. Finished results of a clean, heat applied photo.

Note: Not all colors work well with photos, testing the colors are recommended.

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STAHLS: LASER CUT PROCESS

Process works with: Any STAHLS' Heat Transfer Materials

1. Start with vector art or text, and convert image to blue outline. Then convert any parts that will need to be weeded to red. Next mirror the image and add a cut outline to the file.
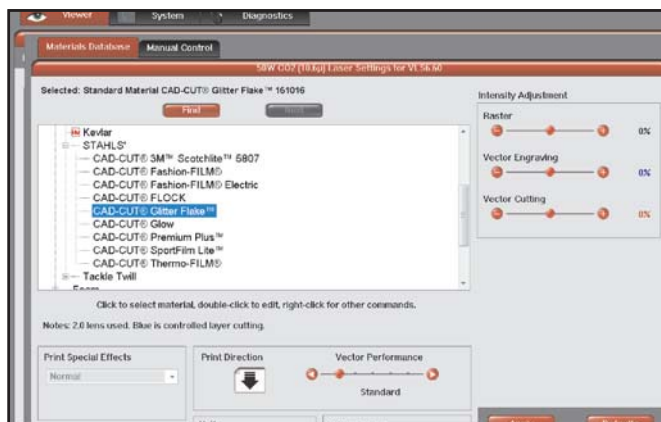
2. Print file to ULS laser system, select Stahls' material from the ULS database. Then select "Fabric/Stahls." Next select desired material.

3. Place sheet on vacuum table shown on page2. Cut the file with laser system and remove.
Note: All insides have been cut away as seen above.

4. Peel the transfer material.

Note: Because inside parts were cut through with the laser system, the part will peel complete in one single process, no weeding necessary.

5. Heat apply then warm peel the carrier (backing).

6. Finished results on mini-T shirt.
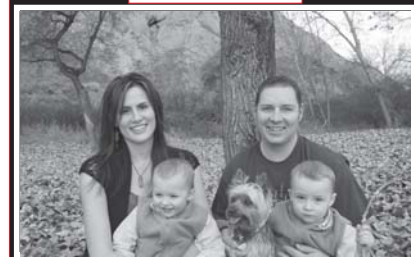
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Process works with: ANY STAHLS' Heat Transfer Materials

1. Combining different laser processes and colors together are simple with a laser system. Use processes on pages 2-4 to setup file(s).
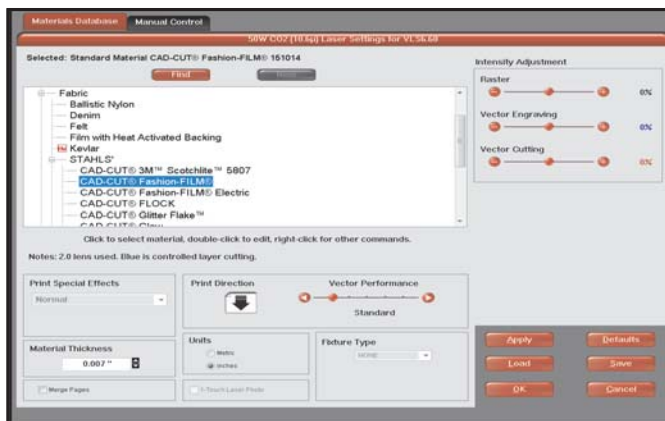

2. Design files so that there is a matching male and female notch with the red laser cut path.
Note: This process can be used for as many colors as needed.

3. Print file to ULS laser system, select Stahls' Material from the ULS databse.
Select: Fabric/Stahls'/select desired material.

Note: Each color will need to be process separately using steps in previous pages.

4. Place the laser cut notch in the carrier (backing) together then heat apply both colors at the same time.
Note: This process can be designed for as many colors as needed.

5. Heat apply both colors at the same time, then warm peel the carrier (backing).

Note: This process will only work with materials that have a similar heat and time setting.

6. Finished heat applied laser cut GlitterFlake™and laser engraved Fashion-FILM®.

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