

Print Guide for GIS Day T-Shirt:

Design Specifics:

- Design is 5 color, spot (no process colors used)
- There are no halftones in the design, so there are no LPI (lines per inch) requirements
- Design is recommended for imprinting on a white, yellow, red, orange or blue shirt
- Design is a vector graphic, no images are used, and no linked files. Fonts are converted to paths.
- Design is to size, but may be reduced for your application
- Colors used in design are as follows and indicated in universal Pantone Matching System (PMS) that are standard in the industry:

Dk blue = 286C

Lt blue = 3005C

Dk green = 349C

Lt green = 347C

black - standard

discharge ink – white (if imprinting on other than white shirt)

Note: the 'C' after each number above indicates "coated stock". Most silkscreeners refer to the 'U' (uncoated) letter, because they are printing on shirt material, not shiny paper stock (coated). The same PMS number with a 'U' will look much duller than its 'C' counterpart. It is recommended to have the silkscreener match the PMS color with the 'C' designation for correct depth of color.

Silkscreening Film Specifics:

Some silkscreeners offer their own film production , you may want to consider using this service. There is usually an up-charge for this. If producing your own film with a pre-press house, please see below:

- Use your in-house film image setter or send file out to a local pre-press house
- Request POSITIVE film, emulsion UP (very important)
- Request spot separates (each PMS color listed above is on a different piece of film or separate-5 total) [i.e.- Each element of the design containing green 349C would be on one piece of film. Each element of the design containing dk blue would be on another piece of film. When all color separates are overlaid one on top of another, they create the complete design]
- Request no trapping (the overlapping of colors on film)
- Request registration marks on all film separates
- Request a color digital proof (if you do not have output equipment)

Production Specifics:

- Take all 5 film separates and 1 color proof to silkscreener
- Take list of 5-PMS colors above for silkscreener to match inks
- Request color samples of final ink colors to be used before production. Compare these to your color digital proof.
- Request a sample imprint on a scratch t-shirt, or pellon (square piece of shirt-like material) to view registration and how close the colors match up, before production
- NOTE: you will need to create a discharge ink plate that includes all colors if imprinting on any shirt color other than white. This is the base color to print other colors on top, to prevent shirt material bleeding through.

Note: Registration is the accurate butting-up of colors next to each other. You should not see any white of the t-shirt showing through (as thin lines) between colors that have no white between them in the digital color proof)

Print Guide for GIS Day Button:

Design Specifics:

- Design is 4 color process (use .tif files supplied)
- Request 133 LPI if printing on uncoated stock or 150LPI if printing on coated stock
- Design is recommended for imprinting on a white paper
- Design is a raster graphic, no images are used, and no linked files
- Design works best on round style button
- Be sure to get cutline, image area, button edge dimensions from button manufacturer if you are doing your own printing

FILM Specifics:

Note: It is recommended to use button manufacturer to create film, and to send enclosed button digital file direct to manufacturer. If this is not possible, see below:

- Use your in-house film image setter or send file out to a local pre-press house
- Request NEGATIVE film, emulsion DOWN (very important) 133 LPI or 155 LPI (see above)
- Request CMYK process separates (each process color is on a different piece of film or separate-4 total) [i.e.- This time the design is made up of cyan, magenta, yellow and black combinations: CMYK. Film separates you get back will be labeled cyan, magenta, yellow, black (K)]
- Request normal trapping (the overlapping of colors on film)
- Request registration marks on all film separates
- Request a matchprint color proof (if you do not have output equipment). Recommend matchprint instead of color key, as the matchprint is made directly from the film negatives. This is what the printer has to use for color and registration guidelines.
- NOTE: be sure to include cutline on your film (get specifics from button manufacturer/printer)

Production Specifics:

Note: If doing your own printing of buttons, it is recommended to get button template from button manufacturer before printing. It is also recommended to request proofs from button manufacturer. If doing your own printing, see below:

- Take all 4 film separates and 1 color matchprint to printer
- Take list of 4-PMS colors above for printer to match
- Request a blueline for your approval before production begins [Note: a blueline is a light blue version of the complete design. It is an inexpensive method used by the printing industry to make sure the design has been accurately stripped up for printing)
- Request a pre-production proof sample or production run sample (some facilities may want to pull from the actual production run and adjust while the job is on the press) as a press check