Triumph™ Universal Polyester
Printing and Processing Tips

The following are printing tips for Triumph™ Universal Polyester. Multiple printing tips may be applicable depending on your printing configuration and/or equipment.

Prior to Printing/General Handling Instructions

- Acclimate the stock to the press area several hours prior to running. We recommend storing the material in the press area (in the carton) 24 hours prior to use.
- If product has static prior to printing, consider additional time for acclimation or pre-treating the product with ionized air or anti-static spray compatible with your print device.
- For best results a print room relative humidity (RH) of 45% or higher is recommended and below 40% is not recommended. When printing in environments between 40-45% RH adjustments to A/B transfer voltage and/or fusing may be required for best results.
- Separate and gently fan the short edge of the stock before loading into the feed tray.
- Any unused media should be stored in the original box.
- Guillotine trimming of the sheets should not be done prior to printing.
- Artwork should be designed leaving a one-inch (1") margin on both the lead and trail edges of the sheet to avoid the occurrence of edge deletions. When printing with 3 or 4 color 'process colors' a two-inch (2") margin may be required.
- Handle all Triumph Digital Media by the edges to avoid scratching, scuffing and fingerprints.

When Printing:

High-Heat Digital

- If your equipment supports substrate scripting or has a substrate catalog, choose a substrate script or stock setting that is similar to the Triumph Digital Media product you are using (caliper/thickness, synthetic film/polyester, appropriate size, etc.). These transfer current settings should be considered a starting point which may require adjustment depending on print room RH, printer condition and artwork design.
- If your equipment does not support substrate scripting or does not have a substrate catalog, choose appropriate weight and thickness settings for the substrate. On low-volume equipment (i.e. multi-function and desktop printers) choose the "heavyweight" setting for higher caliper materials (8 and 10 mil). The 14 mil is not recommended for use on multi-function and desktop printers.
- Polyester sheet products are more prone to static charging. For best results, choose a press setting that will minimize the applied charge and will maximize the discharge.
- If a jam occurs, try rotating and/or flipping the substrate in the feed tray.
- Print jobs should be processed in short run lengths of 500 sheets with either a bond print job or bond clean-up sheets scheduled between runs on equipment that uses fuser oil. The bond print job or bond clean-up sheets should be run in the same sheet size as the polyester print job. This is common for all synthetic substrates.

HP Indigo

- Triumph Universal Polyester received a 3-star rating from RIT's (Rochester Institute of Technology) HP Indigo certification program. Reference substrate catalog for scripting.

Offset

- Use fast-curing or oxidizing inks. Ink tack should be in the 12-16 range.
- Press speed may need to be reduced to allow more time for ink setting before stacking.
- Feed-pressure and vacuum conditions may need to be adjusted for optimal runnability.
- The ink delivery system needs to be free of all traces of oil-based inks and varnishes.
- Since excess moisture will hinder drying, run press as dry as possible.
- Due to the unique properties of Triumph Universal Polyester some adjustments to offset printing may be required to achieve desired outcomes. Images achieved using 1 print station on paper may require 2 stations and all offset printing should be done in a single pass.
- The drying process can be impacted by the use of spray powder. Do not use dissolvable spray powder. When using spray powder, only use a light coating. Avoid excessive use.
- When multiple print processes will be performed subsequently (ie. copier or laser printed) make sure the correct laser compatible inks are used and the ink has completely cured (at least 7 days).

Post-Processing:

- Punching or die-cutting is the recommended method for any required hole cutting. Drilling should be avoided because heat generated by drilling can cause the edges surrounding the holes to weld together.
- For perfing, 50 teeth per inch (TPI) or greater yields the best results.
- Testing is highly recommended to determine optimum pressure and depth of cut.
- A standard guillotine paper cutter CAN be used to cut Triumph Universal Polyester as long as the cutting blade is sharp and free of nicks. The blade needs to be sharpened at the first sign of chipping or slivering at the cut edge. To prevent the false clamps from leaving any markings, chipboard should be placed on top of every lift prior to cutting. In addition, it is recommended to keep the clamp pressure low.

Each customer and/or end user should determine the suitability of any Triumph Digital Media product for their particular application and equipment. Appvion encourages testing the product on your particular equipment. Samples are available from your Triumph Digital Media distributor upon request.

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