Midwest Imaging & Roller Services Inc.

1453 EARL ST. • MENASHA, WI 54952-0390 • TEL (920) 722-6401 • FAX (920) 722-7783

June 18, 2012

MIDWEST IMAGING LASER ENGRAVER ART REQUIREMENTS:

ILLUSTRATION PROGRAMS SUPPORTED:

- Adobe Illustrator (CS5)
- Adobe Photoshop (CS5)
- Adobe Indesign (CS5)
- Macromedia Freehand (MX)
- Artpro (v8.2)
- Quark Express (v6.5)

BITMAP ART REQUIREMENTS:

- Adobe Photoshop preferred
- TIF is the native format for the Laser Engravers
- TIF, EPS, PSD are approved formats.
- DPI: 508, 635, 1016, 1270 (DPI used should always be discussed)
- 1270 dpi is the most common dpi used for general laser engraving at Midwest Imaging
- 1016 dpi, and 1270 dpi are used for fine type, and intricate objects
- Contone art placed, should be a minimum of 300 dpi native (not res-ed up), and never be saved as a "jpg" format. If the contone has a linework component (type for example) then 635 dpi is the minimum.
- If a file has ever been saved as a "jpg", it should be considered damaged, and will require repair to minimize the damage. (Subsequent saving as an approved format; "tif", "eps, "psd", will not remove the damage)
- Compression, if used, should supported by Photoshop (LZW compression)

VECTOR ART REQUIREMENTS:

- Adobe Illustrator preferred
- Include all placed art, and fonts, Placed images must be a minimum of 300 dpi.
- Placing images at greater than 120% or less than 80% may compromise quality. It is recommended to have placed images at close to 100% of size.
- Placed eps must use binary encoding, never use .jpg encoding.
- · All text should be outlined to avoid any conflicts and reflow issues.

GRAPHICS:

- Minimum Line weights: Positive Copy; .004", Reverse Copy; .006"
- Minimum Highlight Dot: 3%
- Avoid type with fine serifs
- · Recommended Line Screen Range: 55 LPI to 120 LPI

DISTORTION:

• Laser art should be at 100% (not distorted). Some companies require an axial distortion to compensate for web shrinkage. Axial distortion should be applied, or noted, if required, as that is a production distortion, and is not considered a "Flexo" plate distortion.

STEP AND REPEAT:

- Preferably the full layout should be sent.
- If Midwest is to step and repeat the art, complete instructions should be provided.
- If art is staggered, and art is sent as a bitmap, include enough extra units to allow Midwest to crop straight through the art. A staggered "plate" layout in bitmap format will require added chargeable expense.

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PRINTERS AND PRE-PRESS MARKS:

- All register marks should be supplied.
- · Crop marks indicating cutoff should be supplied.
- Lane marks indicating individual webs should be supplied.
- Sleeve information required to ID sleeve should be supplied.
- If microdots are used, a layout indicating location should be supplied.
- Eyeline, and eyemark specs are the responsibility of the customer.PRESS LAYOUTS AND ORIENTATION:
- Orientation instructions are the responsibility of the customer to provide
- Automatic deck positioning requirements are the responsibility of the customer to provide.
- Position of web to the sleeve should be noted, if not centered.
- If microdots are used, a layout indicating location and size should be supplied.

TRAPPING:

- Trapping specifications should be supplied by the customer
- Typical minimum trap: .012"

COLOR REPRODUCTION:

- Press profiles are the responsibility of the customer.
- · Latran Proofs based on the press profile are available.
- · Latran Proofs are only as reliable as the press profiling.
- Press profiles and any necessary minimum dots are the responsibility of the customer.

MISCELLANEOUS:

- Midwest Imaging will evaluate supplied art, at the request of the customer. Unless requested, customer will be responsible for art quality. If Midwest performs the evaluation, and customer proceeds with art judged by Midwest to be of poor quality, customer will be responsible for art quality.
- FTA "FIRST" specs are recommended reading for quality flexo printing. Please click the following url for more information: http://www.flexography.org/edutrain/first.cfm

Sincerely, Bryan Menting

Laser Pre-Press Technician Midwest Imaging & Roller Services Inc. 1453 Earl St. PO Box 390 Menasha, WI 54952-0390

If you have any questions on any job, please call us. A great printing job should only be output once.