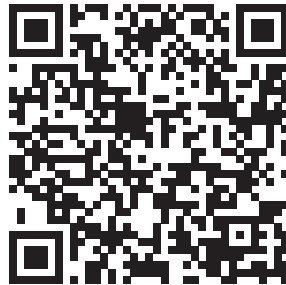




SidePouchTM

A PRODUCT OF AUTOMATED PACKAGING SYSTEMS

ART GUIDELINES MANUAL



Prepared by the Art Department of Automated Packaging Systems, Inc.
13555 McCracken Road • Garfield Heights, Ohio 44125

www.autobag.com • artdept@autobag.com
Phone: 330-528-2000 • Fax: 330-342-2439



WELCOME TO AUTOMATED PACKAGING SYSTEMS

The purpose of this manual is to help you understand the requirements to produce artwork that becomes the high quality printing that we are proud of here at Automated Packaging Systems.

Our best resource is our people. The Prepress Group at Automated Packaging Systems is staffed with FTA (Flexographic Technical Association) FIRST Certified Prepress Operators with many years of experience. Many of our Printing Department staff and managers are also certified as FIRST Press Operators and Implementation Specialists.

Good art is essential for high quality printing in flexography. It should not only anticipate potential advantages of flexography, but also the inherent limitations of the flexographic process. One of the most over-used and under-qualified phrases that the Pre-Press group encounters is "Use camera-ready art supplied". A high majority of arts that are supplied by customers have to be reviewed and adjusted by an artist in the Art Department. Although art is often received in a clean and well-constructed form, it is sometimes unusable "as is" because it was not designed for flexographic printing or did not take into account Automated Packaging Systems' manufacturing requirements.

Flexographic art is entirely different from art designed for offset or letterpress. Flexography is defined as "a method of direct rotary printing using resilient, raised image printing plates, affixed to variable repeat plate cylinders, inked by a roll or doctor blade wiped engraved metal roll, carrying fluid or paste type inks to virtually any substrate". The primary substrate that we print on is a stretchable form of Polyethylene. There are many factors that must be considered before the finished art can be prepared. Automated Packaging System's Pre-Press Group is uniquely qualified to interpret the customer's wishes into an art of the highest quality, yet retain the reliability and simplicity required for efficient production. It is critical at the outset to prepare artwork with all the allowable tolerances and sharp, clean, mechanical elements, because the print job will never be better than the art.



ABOUT OUR SYSTEM

We are fully equipped to review your your design, make suggestions, create digital files or take your Mac files and put the finishing touches on them in preparation for flexo printing and will be glad to get you started by making you a template of the bag size you need that will show you the available art area. Please call the number below, send us an email or contact your Automated Packaging Systems sales representative for further details.

Once your art is ready, please provide all mac files and a full size color print or PDF of your Graphics. Also include all supporting files (jpps, tifs, eps, psd, etc. as well as all fonts). Not supplying these items will only lead to delays in producing your art.

Email can used to receive most types of files (under 10MB) and to send pdf proofs that don't require a color ink swatch to be approved by the customer. If the art files will be emailed or placed on the ftp site, please send a pdf for comparison and QA purposes. If you will be sending the files on a disk, a full size color print would also be appreciated.

The Macintosh applications we use are:



Adobe
ILLUSTRATOR



Adobe
PHOTOSHOP



Adobe
INDESIGN



ARTPRO

Contact and FTP info:

Art Department email: artdept@autobag.com

Address: 13555 McCracken Road, Garfield Heights, OH 44125, USA

Phone: 1.330.528.2462

FTP site: [ftp.autobag.com](ftp://ftp.autobag.com) user: artftp password: art\$stuff

(If you are uploading to the ftp site, please send the art dept. a notification email.)

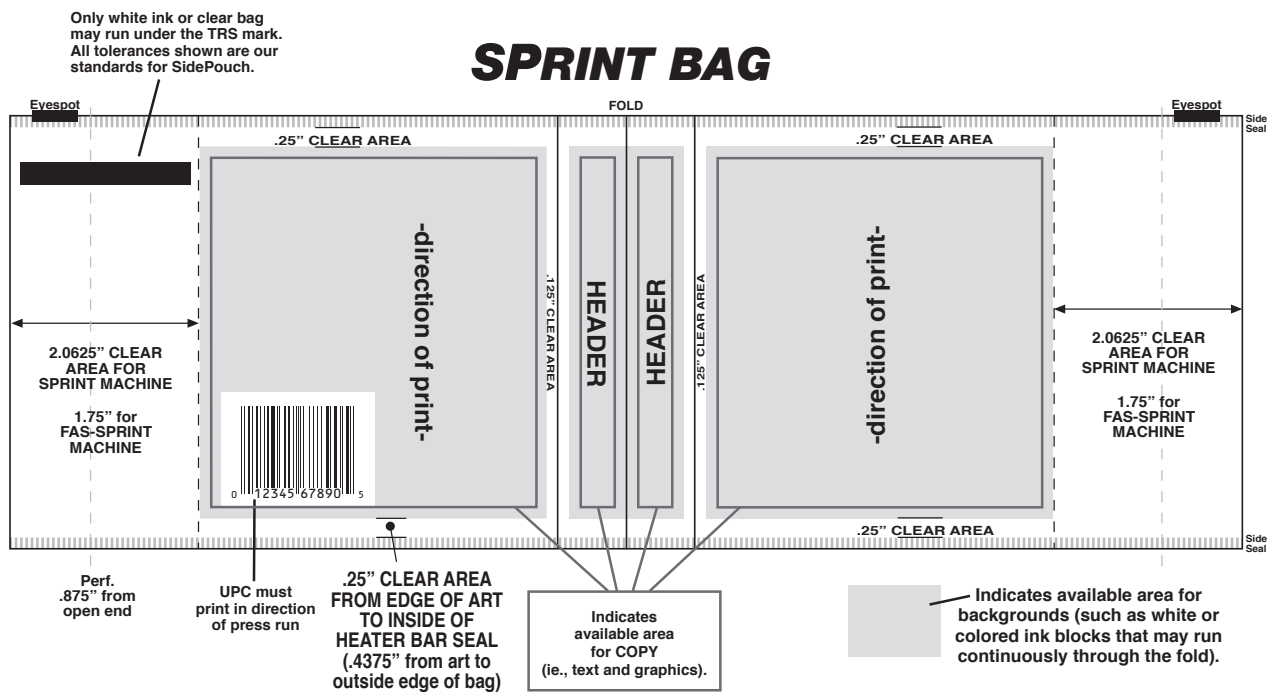
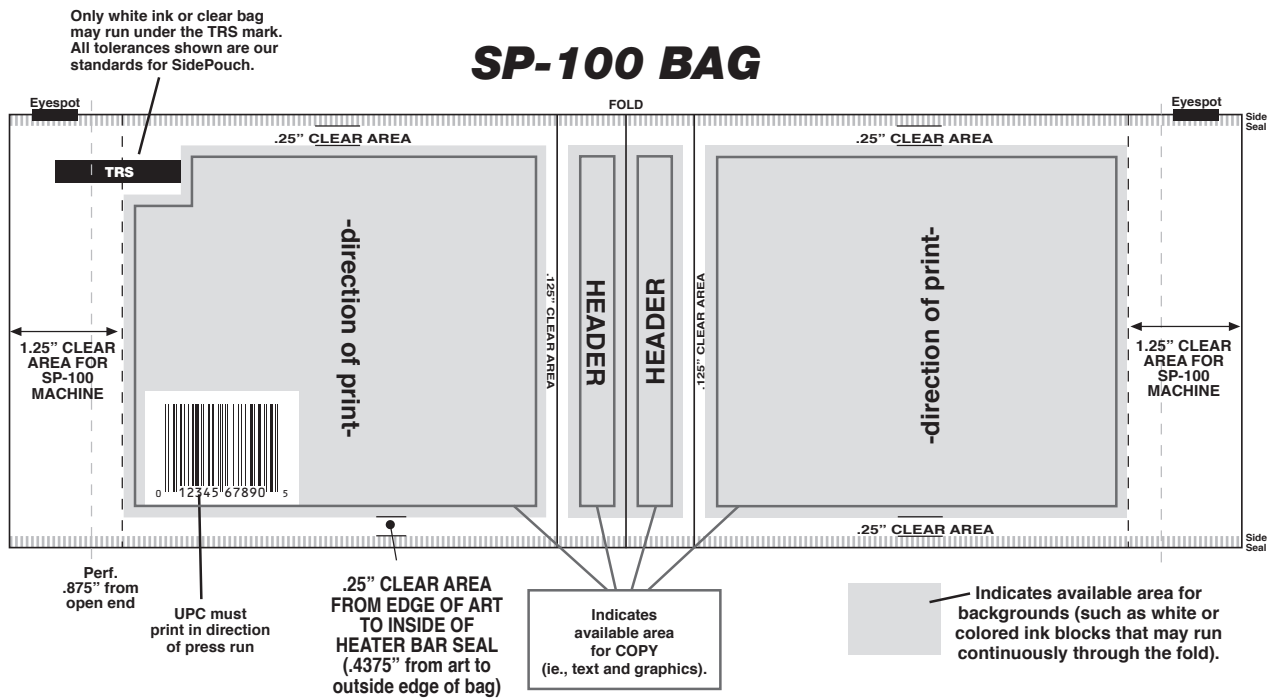
We print spot color tints and process print at various line screens (mostly 110 for spot colors and 133 for process). Our presses require us to print screen angles 8 degrees off of standard LITHOGRAPHIC angles. All 4-color process and complex arts must first be reviewed by the Customer Service Pre-Art Team.

The following pages provide a guideline for layout, size, color traps, etc. This is only a guideline. If you already have graphics available, we are fully staffed to make those adjustments digitally although some additional charges may apply.

By referring to this guide, you will save valuable time in getting your art to press and ultimately bags to your facility.

SidePouch Specifications

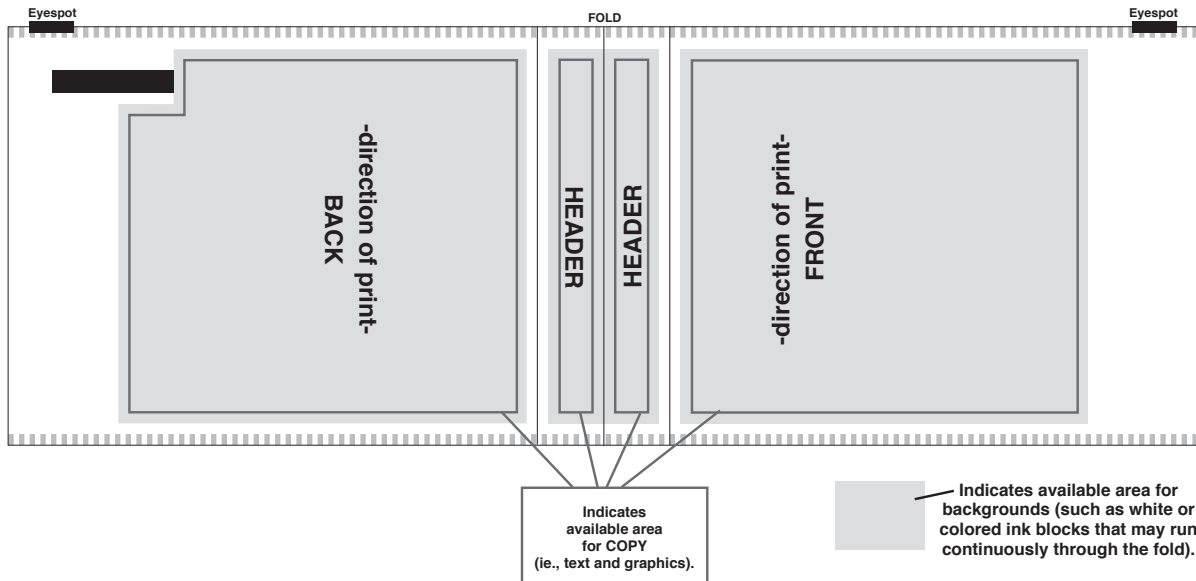
Measurements are not to scale



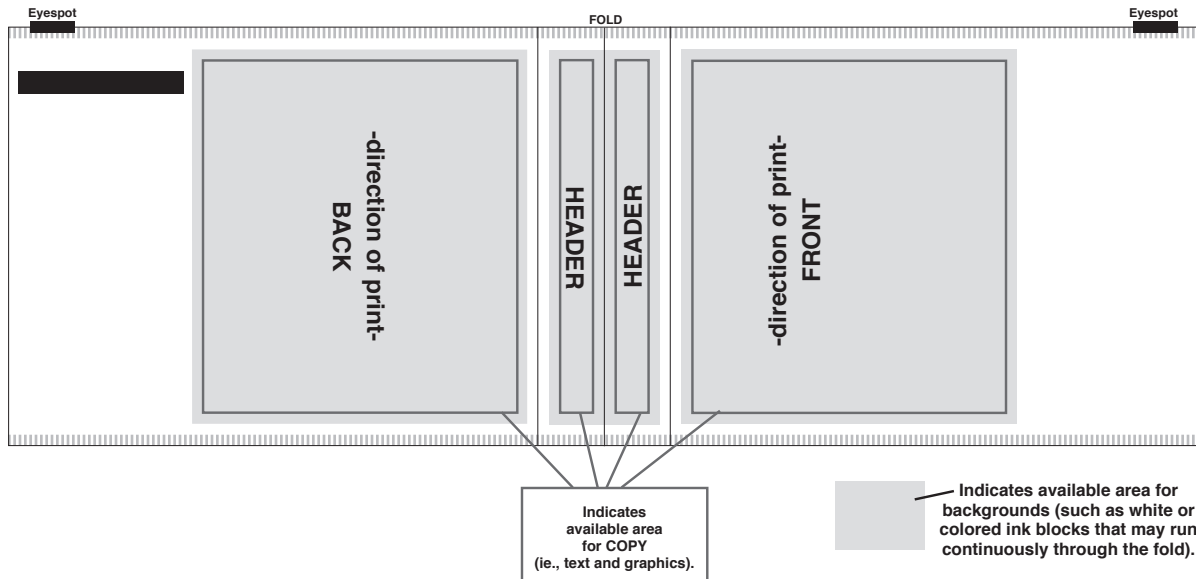
See SidePouch Reference page for further details

SidePouch Header Bags

SP-100 HEADER BAG



SPRINT HEADER BAG

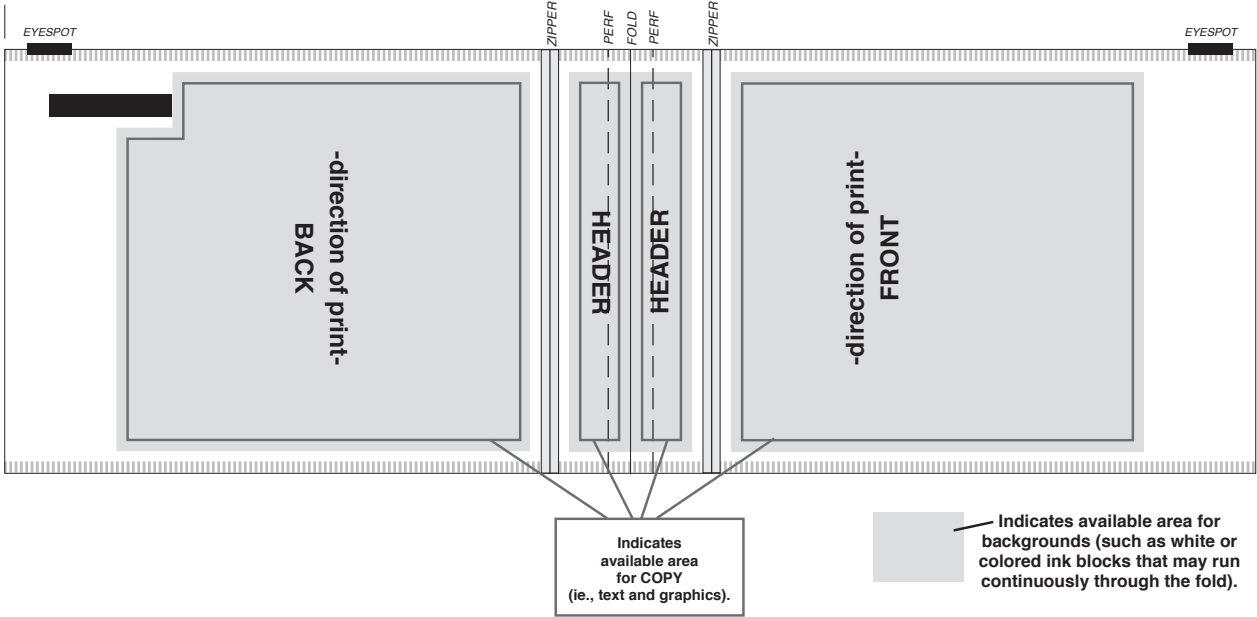


See SidePouch Reference and Specification pages for further details

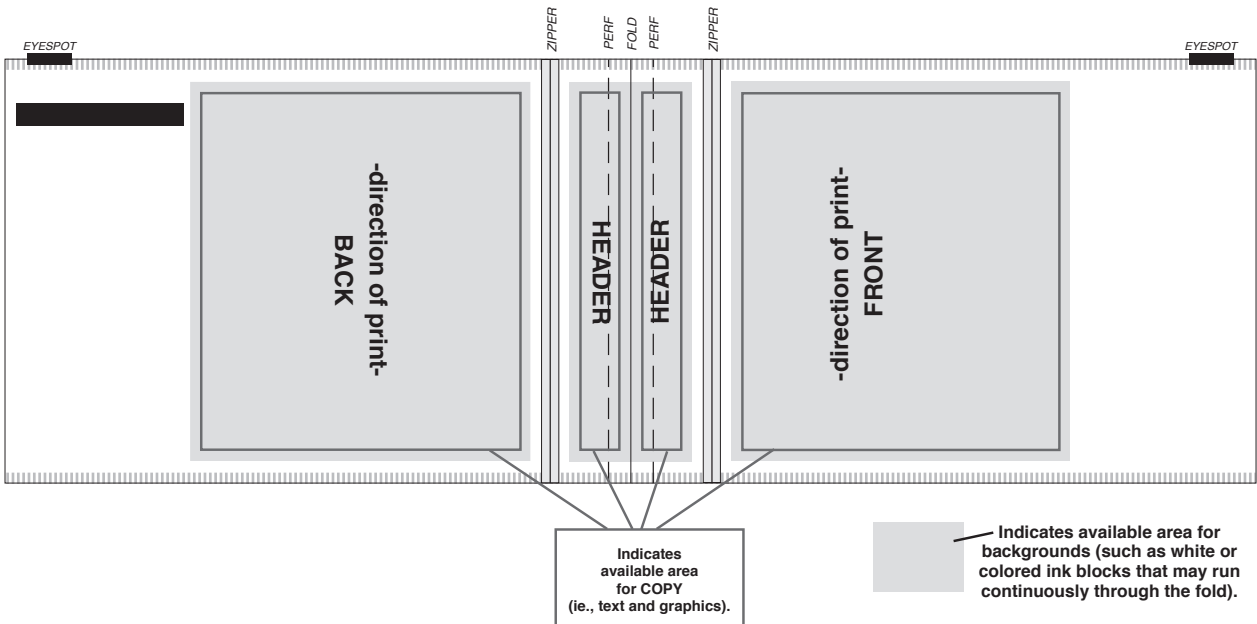
SidePouch Zipper Bags

Can be ordered with or without Perf

SP-100 ZIPPER BAG

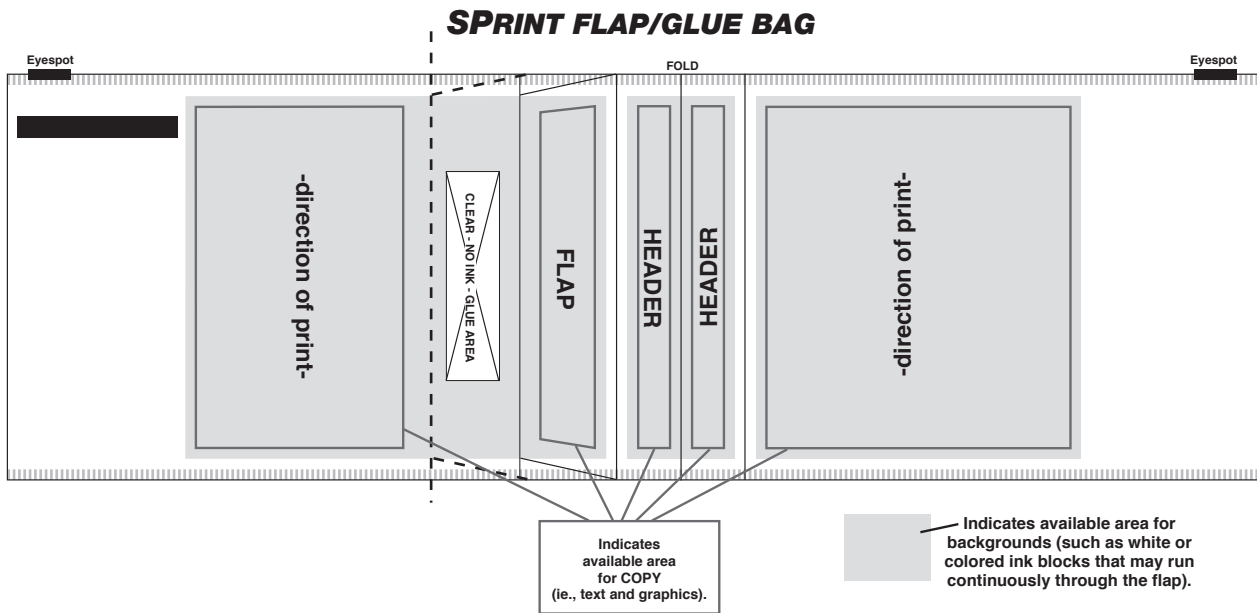
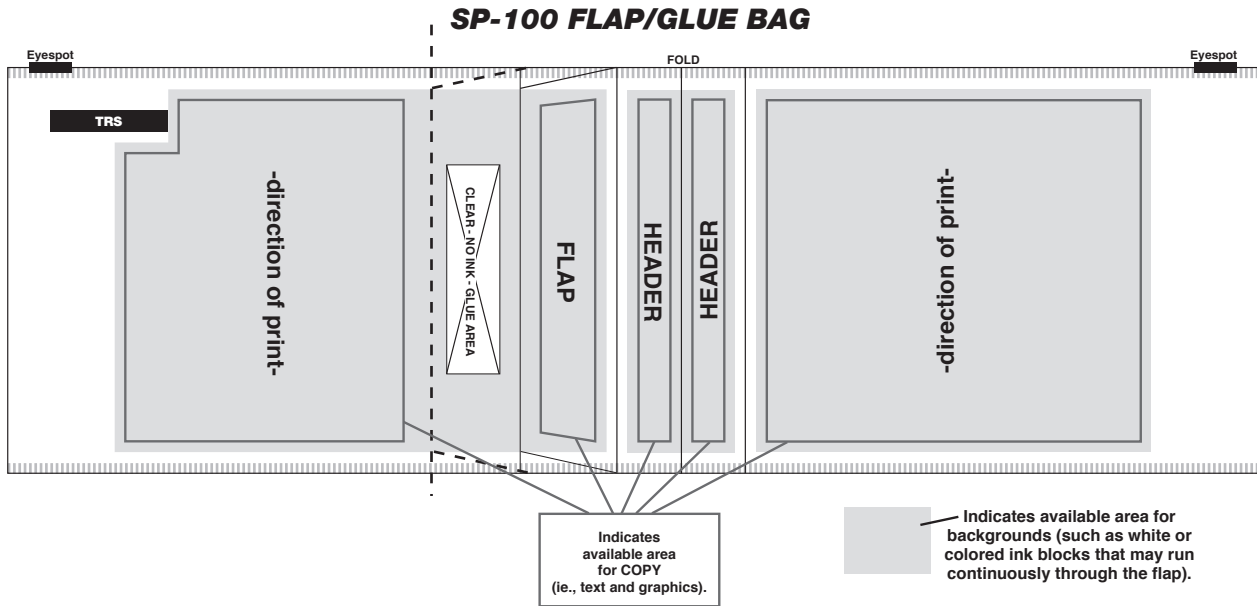


SPRINT ZIPPER BAG



See SidePouch Reference and Specification pages for further details

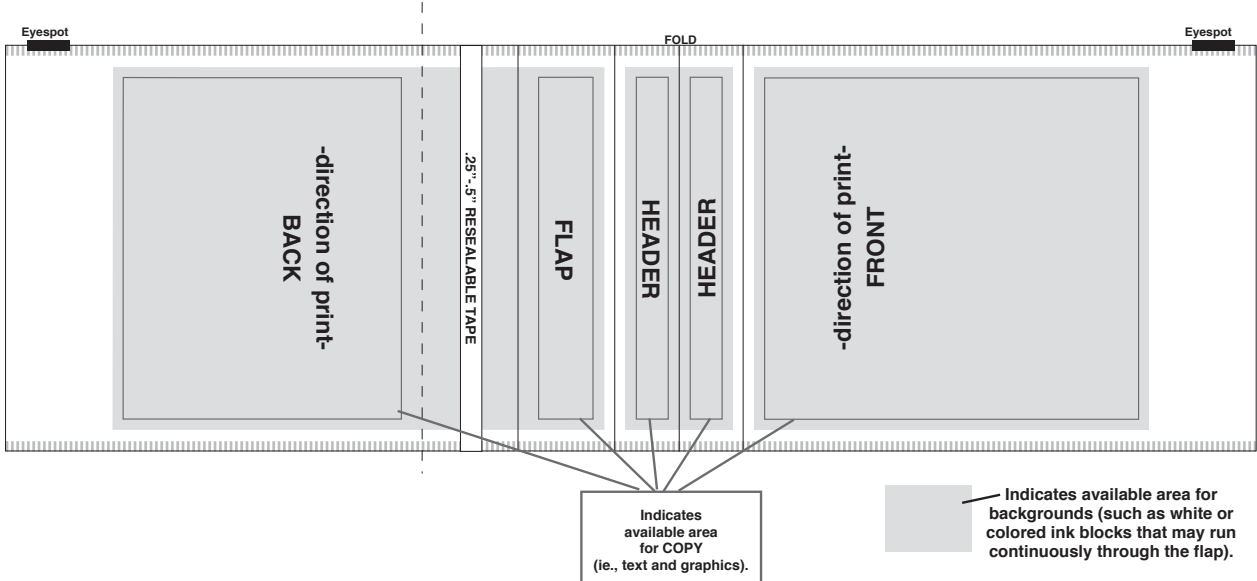
SidePouch Flap / Glue bags



See SidePouch Reference and Specification pages for further details

SidePouch Flap / Tape Bags

***This is HAND LOAD only,
(No TRS needed)***

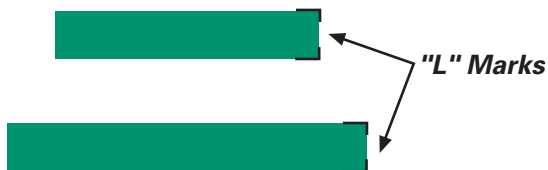


See SidePouch Reference and Specification pages for further details

SIDEMARK REFERENCE

TRS

- Target registration mark that Sprint and SP-100 baggers use to index bags through the loading machine.
- Location for **SP-100**: 1/2" from side
1/2" from bottom
1 3/8" long
- Location for **Sprint and FAS-Sprint**: 1/2" from side
1/8" from bottom
1 7/8" long



*TRS can be on either the front or back, left or right.

"L" marks are to print on the edge of the TRS mark and will assist the Mounting, Press, and Converting Departments in verifying the correct position of the TRS. They will be in white ink (darkest color if white not used) and will be on the same plate as the eyespots. They will be on the bottom end of the TRS (bottom of bag), right on the edge. They will be 1/8" along the length and 1/16" along the width of the TRS.

PLEASE NOTE THE ABOVE INFORMATION APPLIES TO ALL NEW APPLICATIONS. THERE ARE SOME ARTS IN EXISTENCE THAT VARY FROM THIS STANDARD.

EYESPOT

- A target mark is used by APS Converting Equipment. The eyespot is trimmed off by the SP-100 and Sprint Baggers.
- Location: 1/4" from bottom of bag, split side-to-side
1/2" long
1/8" tall
printed in white (darkest color if white not used)

PRINT TO SEAL LOCATIONS

- 1/4" from edge of art to inside of heater bar seal (side seal)
(.4375" from art to outside edge of bag)
- 1/8" from manufacturing seal or fold (top of bag).

PRINT COMBINATIONS

- Nine available stations on press
- Target registration requires one station
- Varnish overcoat requires one station

MAXIMUM COMBINATIONS

- Ten colors, no target registration (handload, no machine)
- Nine colors and target
- Eight colors, varnish, and target

BARCODE SPECIFICATIONS

Below you will find Automated Packaging Systems Flexographic specifications for making barcodes for printing and scanning. We have the software to create ALL codes in our Macintosh system but we need to know what kind of code (UPC, 3 of 9, Int. 2 of 5, code 128, etc.).

If the barcode is printing on clear material, it will require a white block underneath so the code will scan. Other scenarios where a white is required for scanability could include, but are not limited to barcodes printing on any other colored material but white. Most importantly, a high contrast between the barcode color and its background is essential for scanning. Two whites are required if the white print is an Autografix white ink.






The Art Department has a list of PMS colors and their reflectance values that help determine if the barcodes will scan when using certain Pantone colors. Generally, colors with high amounts of red will not scan.

Quiet zones are clear areas around bar codes that serve to isolate it from surrounding text and graphics. Bar code symbologies typically define a minimum amount of clear space that is to serve as the quiet zone. Industry standard recommends .25" quiet zone on each side of the code.

**If you are a *Medical* customer and *must* create your own code, please contact us for current bar width reduction and size minimums.

Below are examples of the more common code types and our specifications used to create those codes:

ALL BARCODES REQUIRE A .5 MIL BAR WIDTH REDUCTION (BWR) 2D CODES REQUIRE A 1 MIL BWR

| | |
|--|---|
|  <p>*+H1604341061110*</p> | <p>Code 128 No more than 18.0 CPI (characters per inch), Min .5" high, No less than .0101 narrow bar</p> |
|  <p>0 1 2 3 4 5 6 7 8 9</p> | <p>Code 39 No more than 6.8 CPI, Min. .5" high, No less than .0117 narrow bar and 2.4 ratio</p> |
|  <p>0 1 2 3 4 5 6 7 8 9</p> | <p>Int. 2 of 5 No more than 6.8 CPI, Min. .5" high, No less than .0120 narrow bar and 2.4 ratio</p> |
|  <p>0 1234567890 5</p> | <p>UPC / EAN No less than 90% magnification, Min .5" high</p> |
| <p>2D codes (GS1 Datamatrix, Datamatrix, QR, etc.)</p>  <p>1 MIL Bar Width Reduction (BWR) No less than .018 cell size</p> | |

COLOR

MATCHING

- We have the ability to match Pantone Matching System (PMS) colors.
- We can also custom match a sample supplied by the customer.

PRINTING COMBINATIONS

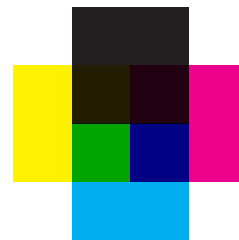
- Maximum Ten stations on press.
- Varnish overprint requires one station.
- Target recognition requires one station (if required).

PRINTING SEQUENCES

Color laydown is from lightest to darkest. (Unless it's reverse print for lamination)

Example:

- 1) White
- 2) Yellow
- 3) Blue
- 4) Black
- 5) Varnish (optional, only if product requires.)
- 6) TRS (Target Recognition requires one station)



OPACITY

- Inks are basically transparent.
- Use metallic inks or dark colors for greatest opacity.
- Colors are enhanced when printed over white, but still may be transparent.

GRAPHICS REVIEW

Ink Bleeds, Screens, Process print should all be reviewed by our Customer Service Pre-Art Team and Press department

Some ink bleeds will require Etched press cylinders which can be costly and greatly increase lead times.

Some inks do not screen well, we do not screen White or Metallic inks.

TRAPPING

- Holding lines should be 1-1/2 (1.5) point size minimum for registration.
- Adjoining colors must overlap by at least 1/64" (.0156") although 1/32" (.0312") is preferred. All trapping will be handled by our imaging department software.
- One metallic color cannot be printed over another metallic color.

• Color Traps (examples):

- Light Blue over yellow produces green trap
- Blue over red produces dark blue trap
- Green over orange produces dark green trap
- Pink over yellow produces red trap



TYPE AND LINE WEIGHT SPECS FOR READABILITY AND QUALITY PRINT

See following pages

- Minimum **positive** type is 5 point **Sans Serif**.
- Minimum **reverse** type is 6 point **Bold Sans Serif**. For reverse print, the bolder the style, the better the reproduction.
- Minimum positive line gauge is 1 point.
- Minimum reverse line gauge is 1-1/2 (1.5) points.
- Thin positive lines and type may print broken or wavy and may be unreadable.
- Thin reverse lines and type will fill in and may be unreadable.

***Metallic ink minimum type sizes are: 12 point Positive and 14 point Reverse.**

We may also suggest a larger size depending on typeface selection (serif vs sans serif).

TOTAL PLATE COSTS

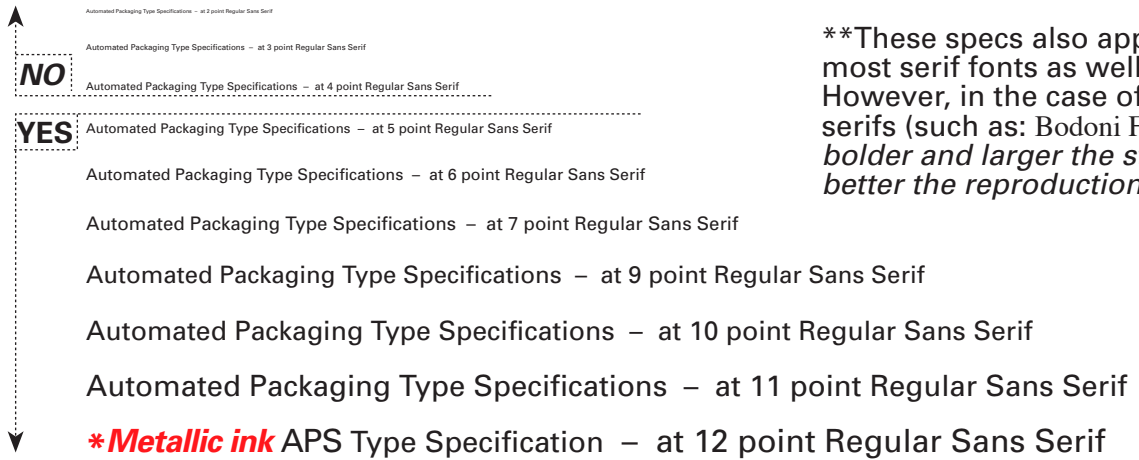
(includes art, Imaging and plate department's, labor and material)

- Artwork **will not** be worked on until a Purchase Order is received. All new and revised arts will be quoted automatically.
- Customers are billed for the first set of plates only, but not until art is approved.
- If a customer makes changes to an existing design, they are billed for only the plates that change.
- When plates wear out, APS will replace them at no cost to the customer as long as no changes are needed. **NOTE: Buyer's artwork, drawings and/or blueprints ("Artwork") will be destroyed in the event that no bag orders with that artwork are placed by Buyer for a period of four years.**
- APS will not run other plates other than our own on our presses. Our presses are tested and set-up to run our specific type of plate material and thickness.
- Final art and plates are stored on site for reruns.

APPROVAL OF ARTWORK

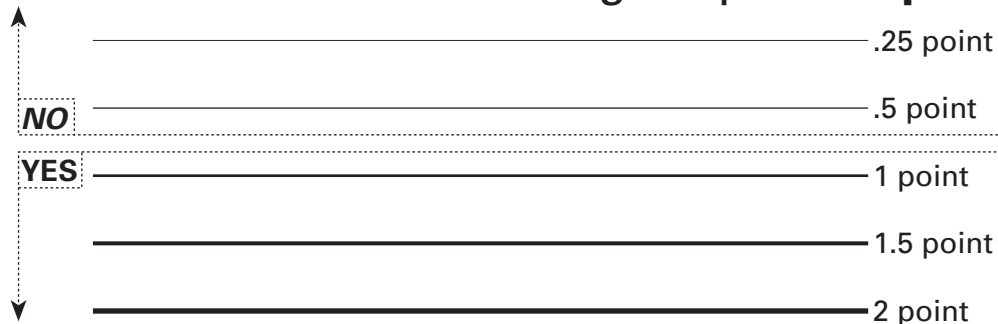
- All new and revised art will be proofed to customer prior to scheduling of order.
- Proof formats:
 - Pdfs can be emailed to speed up approval process, but can only be used if a hard copy proof is not required or color swatches do not have to be approved.
 - Fax copy (revisions and simple new art)
 - Digital Black & white or color paper proofs (new artwork)
 - Color proofs on polyethylene substrate (some limitations)
 - Digital color match proofs (Process print or color critical arts)
 - Bag mock-ups
- Solid color samples of the actual Inks on Poly are provided for color approval.
- Any revision requires written approval.
- **Production of your order cannot begin until we receive your signed approval.**
(if a waiver is necessary for your artwork, we will require the signed waiver to be returned before proceeding)
- If your art has a pre-printed barcode we ask that you return the barcode approval as well.

Minimum Positive Type Spec is 5 point Regular Sans Serif**

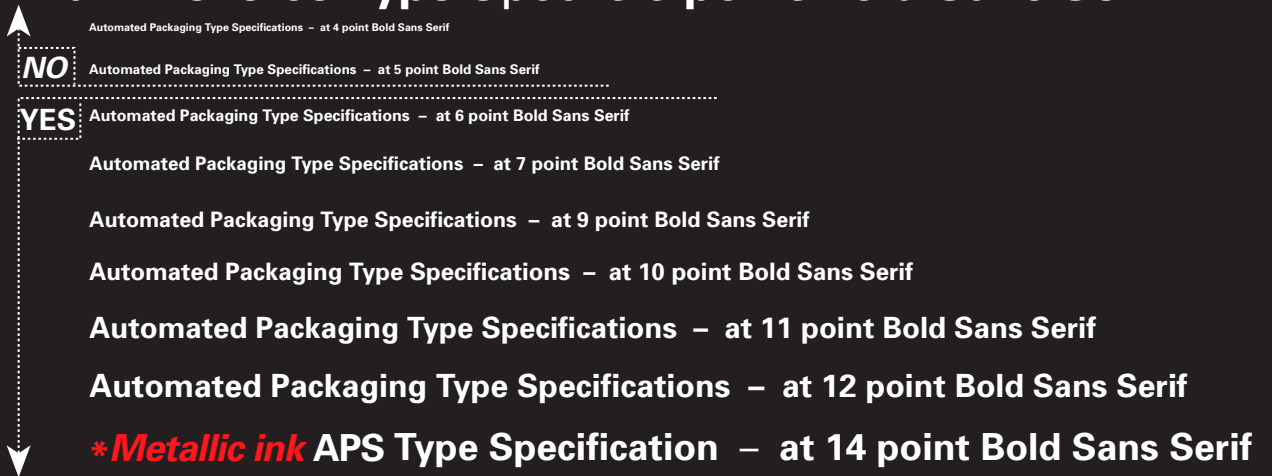


**These specs also apply to most serif fonts as well. However, in the case of thin serifs (such as: Bodoni Fonts), *the bolder and larger the style, the better the reproduction.*

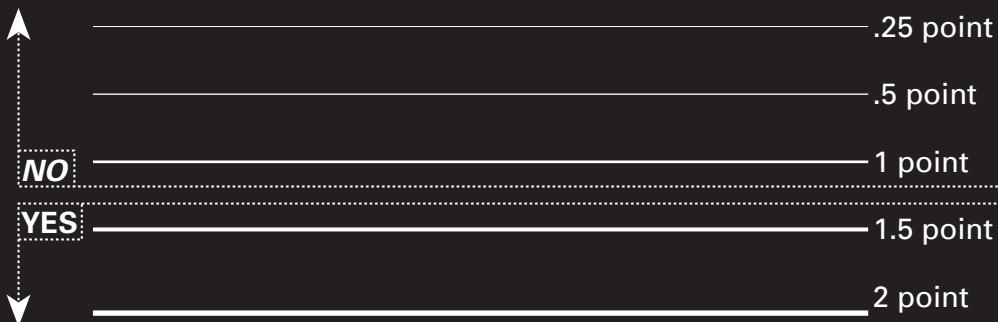
Minimum Positive line weight Spec is 1 point.



Minimum Reverse Type Spec is 6 point Bold Sans Serif



Minimum Reverse line weight Spec is 1.5 points.



Japanese and Chinese type minimum sizes

日本和中国式最小尺寸
日本語と中国語の入力の最小サイズ

Minimum Positive Type Spec is 8 point Regular**

| | |
|------------|---|
| | 自动包装类型规格 -4点正 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-4ポイントで定期的に (Japanese) (Automated Packaging Type Specifications - at 4 point Regular) |
| | 自动包装类型规格 -5点正 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-5ポイントで定期的に (Japanese) (Automated Packaging Type Specifications - at 5 point Regular) |
| | 自动包装类型规格 -6点正 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-6ポイントで定期的に (Japanese) (Automated Packaging Type Specifications - at 6 point Regular) |
| NO | 自动包装类型规格 -7点正 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-7ポイントで定期的に (Japanese) (Automated Packaging Type Specifications - at 7 point Regular) |
| YES | 自动包装类型规格 -8点正 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-8ポイントで定期的に (Japanese) (Automated Packaging Type Specifications - at 8 point Regular) |
| | 自动包装类型规格 -9点正 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-9ポイントで定期的に (Japanese) (Automated Packaging Type Specifications - at 9 point Regular) |
| | 自动包装类型规格 -10点正 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-10ポイントで定期的に (Japanese) (Automated Packaging Type Specifications - at 10 point Regular) |
| | 自动包装类型规格 -11点正 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-11ポイントで定期的に (Japanese) (Automated Packaging Type Specifications - at 11 point Regular) |

We can print as small as 6 point positive type if **only the Japanese or Chinese text is on it's own plate separate from all the other art.

Please note that this page is only a sample of the type and size. It does not truly reflect how the type will actually **print** on our presses.

Minimum Reverse Type Spec is 8 point Bold

| | |
|------------|--|
| | 自动包装类型规格 -4点粗体 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-4ポイントの太字で (Japanese) (Automated Packaging Type Specifications - at 4 point Bold) |
| | 自动包装类型规格 -5点粗体 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-5ポイントの太字で (Japanese) (Automated Packaging Type Specifications - at 5 point Bold) |
| | 自动包装类型规格 -6点粗体 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-6ポイントの太字で (Japanese) (Automated Packaging Type Specifications - at 6 point Bold) |
| NO | 自动包装类型规格 -7点粗体 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-7ポイントの太字で (Japanese) (Automated Packaging Type Specifications - at 7 point Bold) |
| YES | 自动包装类型规格 -8点粗体 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-8ポイントの太字で (Japanese) (Automated Packaging Type Specifications - at 8 point Bold) |
| | 自动包装类型规格 -9点粗体 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-9ポイントの太字で (Japanese) (Automated Packaging Type Specifications - at 9 point Bold) |
| | 自动包装类型规格 -10点粗体 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-10ポイントの太字で (Japanese) (Automated Packaging Type Specifications - at 10 point Bold) |
| | 自动包装类型规格 -11点粗体 (Chinese Simplified) 自動化されたパッケージの仕様を入力します-11ポイントの太字で (Japanese) (Automated Packaging Type Specifications - at 11 point Bold) |

FEATURES AND TOLERANCES


HOLES, PUNCHES, PERF

AIR RELIEF HOLES:


PERFED (PRFD) OR THROUGH (AIR)

- 1/4" Standard
- Allows air to escape for flatter pkg.
- Avoid open end


ROUND HANGER HOLES (HGR)

- 1/4" to 2" (1/4" Standard) 
- Centered in header if position not specified
- Larger holes serve as door knob/hangers

BUTTERFLY HANGER HOLE (BTR)

- Retail use
- 1" or 1.25" width 

TRIANGLE HANGER HOLE (TRI)

- Retail use
- 1.25" wide x 3/8" 

HORIZONTAL PERF (HEP)

- Runs parallel to manufactured seal

BAG SIZES:

All bag sizes may vary +/- 3/16" in the width and +/- 1/8" in the length.

SPECIAL FEATURES

All special features can vary +/- 1/8". This includes hanger holes, air holes and perforations.

PRINTED GRAPHICS:

All colors that touch will have a standard 1/32" overlap or "trap" to allow for proper registration. This can create a discoloration with certain color combinations. Art can move +/- 1/8" horizontally and vertically. **Warning: it is possible for the art to float within tolerance and the feature to float within tolerance to the point where the tolerances overlap and cause some art to be unreadable, punched out, etc.**


VARNISH OVERPRINT:

Printed bags are subjected to many abrasive forces during printing, converting, shipping, and the end use. Our printed bags have been tested and pass the industry expectations which are: Surface Print Film: 100 rub cycles, 4-lb. Block, print to film. If you have need of additional protection, a varnish overprint may be required.

REGISTRATION:

Print REGISTRATION is +/- 1/32" for LINE print and +/- 1/64" for PROCESS print. Whites are undercut 1/16" where applicable.

MICRODOTS:

These are very small squares (only .009 in. ) that are added to each color for registration.

They are usually trimmed off during Conversion, but sometimes they do end up on the finished bag.

CLEAR AREAS:

A minimum 1/8" clear area is required between the print area and the top of the bag, or 1/8" from the header seal if a header is present. A minimum 1/4" clear area is required between the print area and the side seals.

CLEAR SEALING AREAS:

Each model of machine has its own requirement for clear (No Printing) sealing area at the open end of the bag (where the customer's product is loaded)

SP-100 Bagging system: Requires 1.25" clear at open end of bag (bottom)

FAS-SPrint Bagging system: Requires 1.75" clear at open end of bag (bottom)

SPrint Bagging system: Requires 2.0625" clear at open end of bag (bottom)

IMPRINTING:

The imprint area must be larger than the actual imprint copy by 3/4" in both length and width. Be sure to plan with the maximum imprint area for this bag if multiple imprints will be used. **FAILURE TO ALLOW PROPER MARGIN FOR IMPRINTING MAY CAUSE THE IMPRINT COPY TO FALL OUT OF THE PLANNED IMPRINT AREA.** Once the bag is printed, the only solution is to reduce the imprint copy. Imprinting over varnish is acceptable but must be indicated or requested since our standard process is to knock out the varnish overprint for areas to be imprinted.

TYPE SIZE:

The minimum size for POSITIVE Type is 5 Point for Sans Serif typefaces. Reverse copy must be at least 6 Point BOLD –Sans Serif typefaces. Serif or decorative faces should be made larger. Type printed using Metallic inks should also be made larger. In many cases, art design may require the type size to be below our minimum size requirements. It is not uncommon for type "fill in" to occur, especially with reverse copy. (APS cannot guarantee the print will be readable)