



Autobag[®]

A PRODUCT OF AUTOMATED PACKAGING SYSTEMS

ART GUIDELINES MANUAL

Prepared by the Art Department of Automated Packaging Systems, Inc.
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WELCOME TO AUTOMATED

The Pre-press Group at Automated Packaging Systems is staffed with highly trained specialists ready to assist customers with a wide variety of services.

The purpose of this manual is to help you understand the requirements to produce the high quality printing that has become a trademark of Automated Packaging Systems.

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". At least 95% of all art that is supplied by customers has to be handled 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 currently use Macintosh computers to prepare the Graphics. The applications we use are Adobe Illustrator, Quark Express, and Adobe Photoshop.

We would like you to fill out a Digital Art Specifications Form for any digitally created art you supply. This form is available on page 13 of this manual. It is essential that you include any supporting art (i.e. Tiff and EPS files, UPC codes, etc.) that is used in your file. We have a library of standard fonts, but you should send your own fonts used in your files or convert the type to outlines. **Not supplying these items will only lead to delays in producing your art.** Please provide a color print of the graphics so we can process your art faster.

We are a FLEXOGRAPHIC printer and several adjustments to graphics must be made for our printing presses and packaging machinery so we prefer you send graphics on CD's or DVD, email or FTP Site. We use an all digital workflow and go direct to digital plates so please do not send negatives. We will also do the trapping of colors for our process.

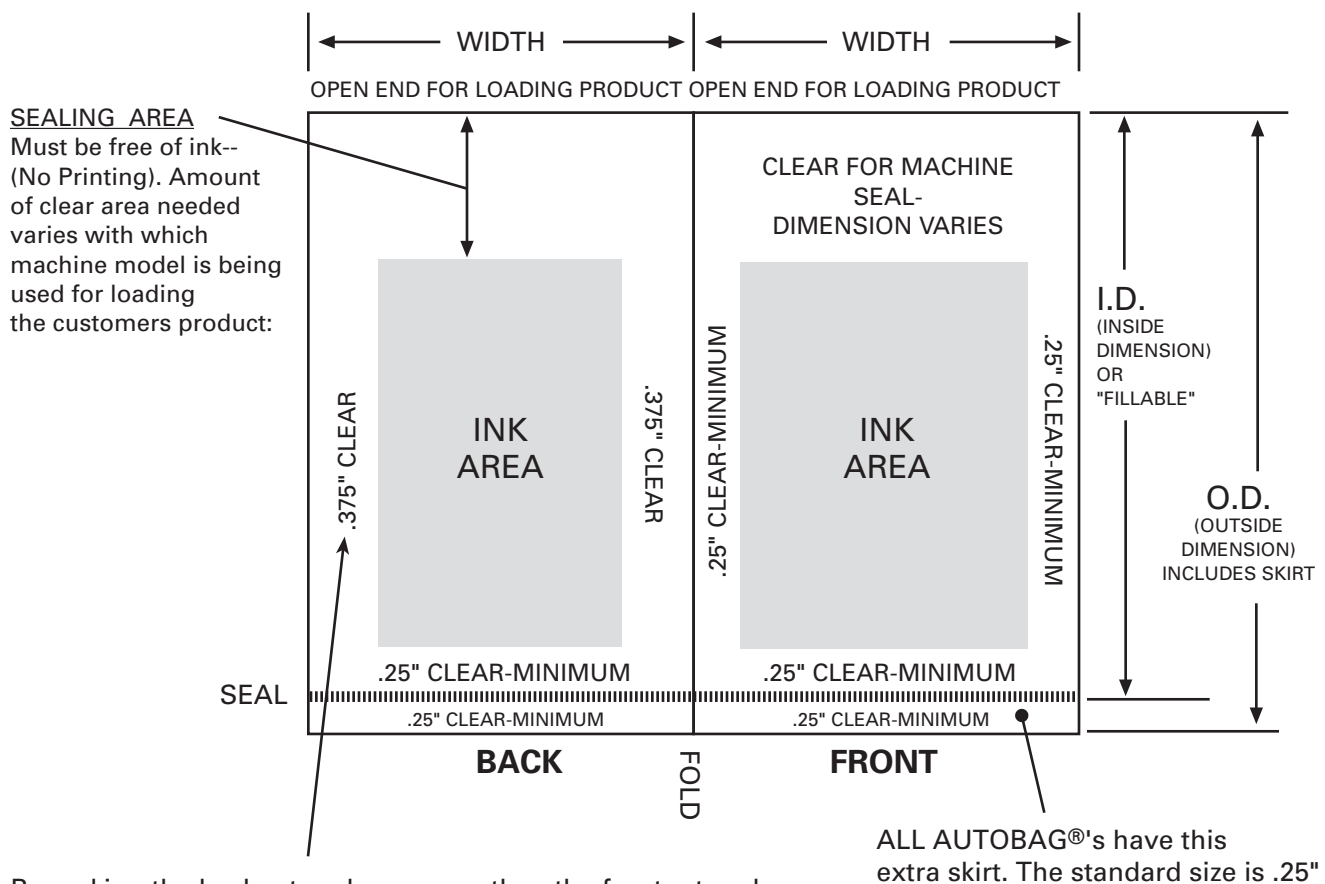
We print Screen Tints and Process Print at 110 lines per inch. Arts that are 7 or more colors will print at 133 lines per inch. Our presses require us to print screen angles 8 degrees off of standard LITHOGRAPHIC angles. All 4-color process arts must first be reviewed by the Graphics Customer Service 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 on the Mac.

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

GRAPHICS LAYOUT

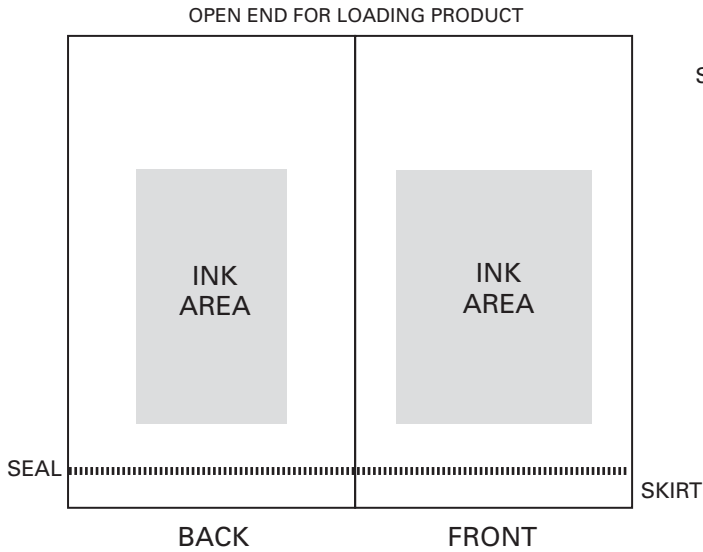
We've shown the layout as if both front and back of the bag are printed. You do not have to print both sides of the bag. If you are only printing one side of the bag, use the FRONT diagram for size and layout.



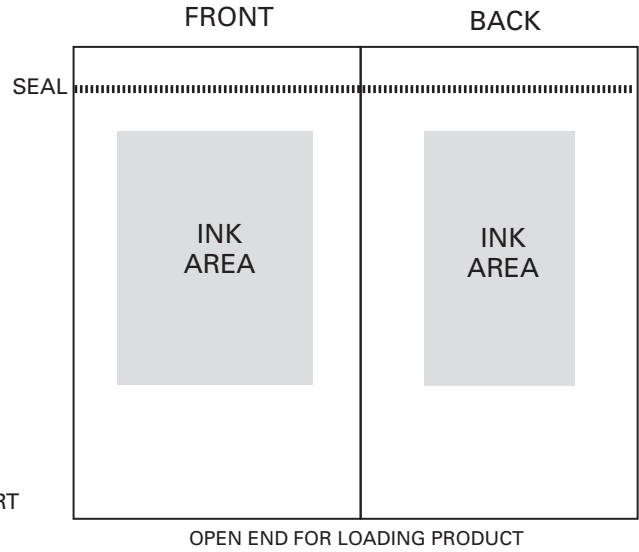
By making the back artwork narrower than the front artwork (using 3/8" Clear Area Margins), any small variations in folding during the construction of the bag will be less noticeable. (If the art widths were the same size the back art would show through the front in the clear areas). This only applies to bags made of clear poly.

LOAD SPECIFICATIONS

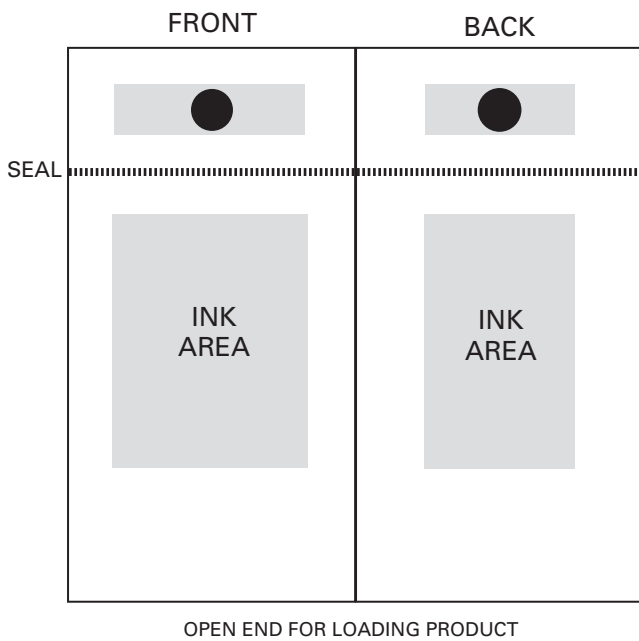
TOP LOAD -- STANDARD



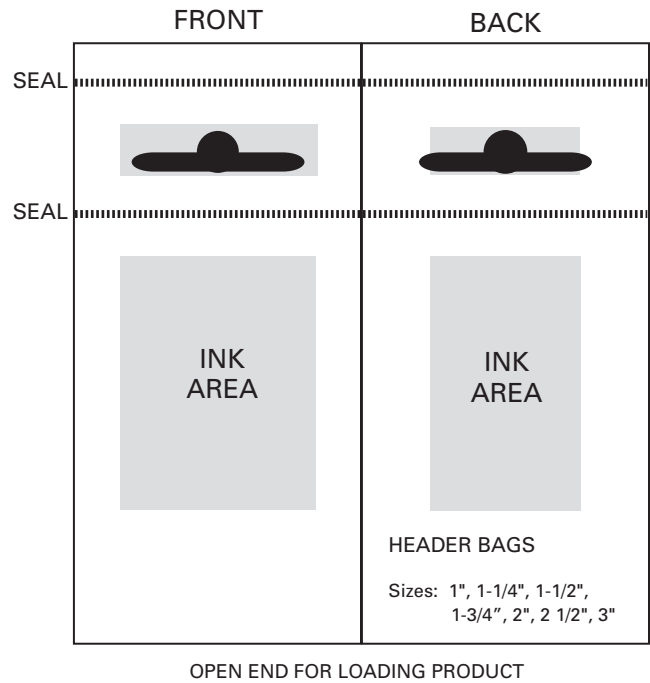
BOTTOM LOAD -- STANDARD



BOTTOM LOAD -- WITH A LONGER SKIRT AND HANGER HOLE

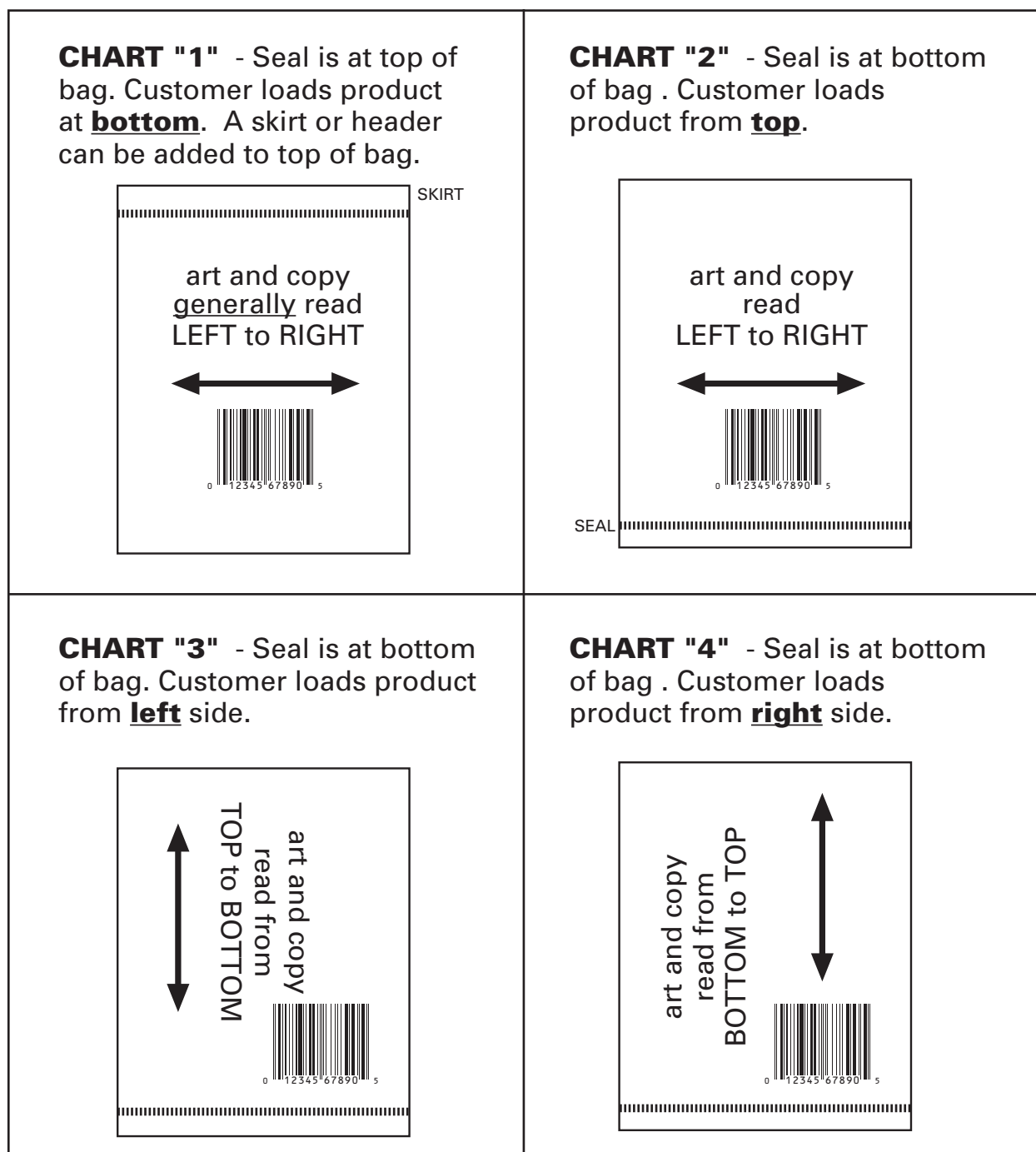


BOTTOM LOAD -- WITH A HEADER (TWO SEALS) AND BUTTERFLY HANGER HOLE



PRINT DIRECTION

The art can print in any direction on the bags. The only exception to this are UPC codes or any of the other types of bar codes. We use our own terminology "**CHART**", for print direction which relates to our manufacturing process. Note bar code orientation is with vertical lines. See examples below:



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.

***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 12345 67890 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 overcoat requires one station.
- Target recognition requires one station (if required).

PRINTING SEQUENCES

Color laydown is from lightest to darkest.

Example:

- 1) White
- 2) Yellow
- 3) Blue
- 4) Black
- 5) Varnish (optional, only if product requires.)

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.

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):
 - 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

FLEXOGRAPHIC TYPE SPECIFICATIONS FOR GUARANTEED READABILITY

See next page

- 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.

TOTAL PLATE COSTS

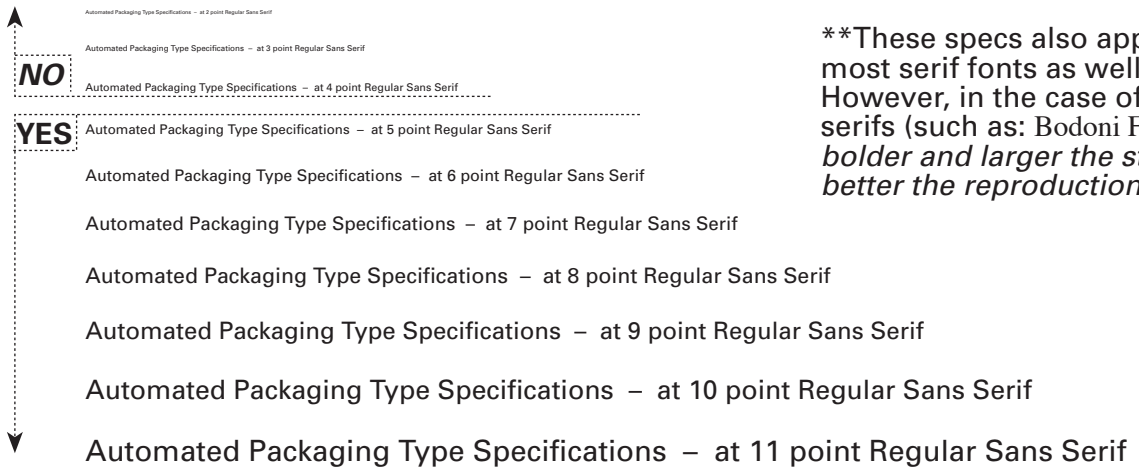
(includes art, Imaging and plate department's, labor and material)

- Artwork **WILL NOT** be worked on until a signed plate quote with a P.O. is received from the customer. All new and revised arts will be quoted automatically.
- Customers are billed for the first set of plates.
- 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

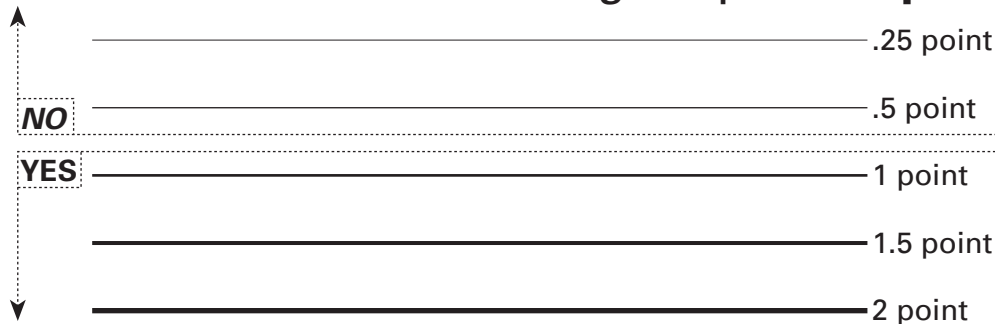
- All new art and all revisions will be proofed by customer prior to scheduling of order.
 - Proof formats:
 - Pdf (Adobe Acrobat) file that can be emailed to speed up approval process.
- Note: This type of proof can only be used if color swatches do not have to be approved
- Fax copy (revisions and simple new art)
 - Digital Black & white or color paper proofs (new artwork)
 - Color proofs on polyethylene substrate
 - Digital color match proofs (Process print or color critical arts)
 - Bag mock-ups
- Color samples of the actual Inks on Polyethylene are provided for color approval.
 - Any revision requires written approval.
 - **Production of your order cannot begin until we receive your fully reviewed and signed approval.**

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

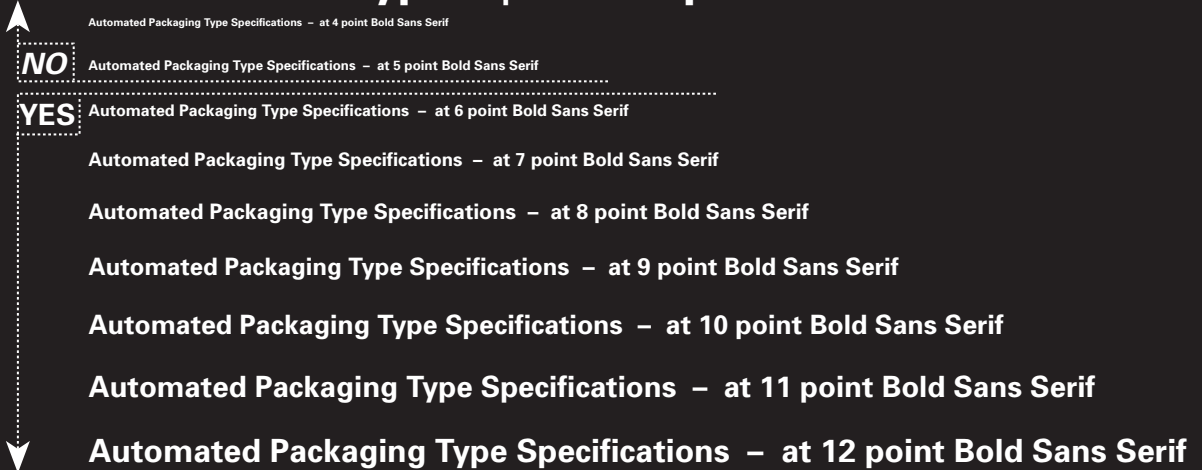


**These specs also apply to most serif fonts as well. However, in the case of thin serifs (such as: Bodoni Fonts), *the bolder and larger the style, the better the reproduction.*

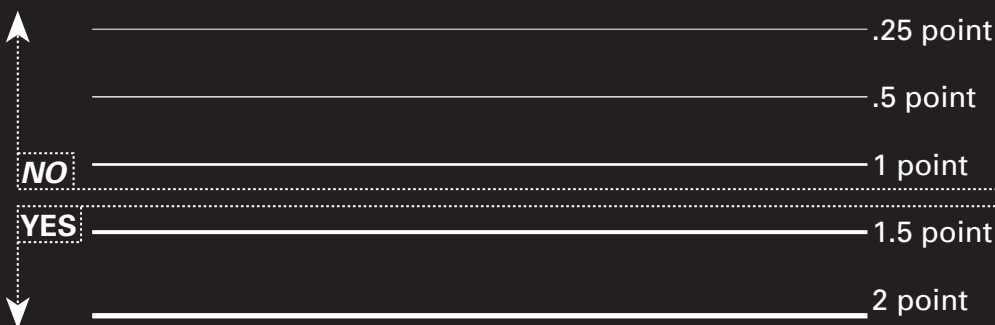
Minimum Positive line weight Spec is 1 point.



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)

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)

NO

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)

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)

NO

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

PERFORATIONS

VERTICAL PERF (VEP)

- Runs parallel to side seal
- Easiest to manufacture; Least expensive

HORIZONTAL PERF (HEP)

- Runs parallel to manufactured seal
- Slower to manufacture; More expensive

PARTIAL PERF (PHP)

- A horizontal perf that does not extend all the way across the bag
- Specify length of perf

HORIZONTAL SEALED PERF (HSP)

- Sealed 'Cell' encloses along mfg. seal easy opening without contents contamination
- Specify length of perf


HOLES AND PUNCHES

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 1/4" width 

TRIANGLE HANGER HOLE (TRI)

- Retail use
- 5/8" or 1" wide 

BAG SIZES:

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

SPECIAL FEATURES

All special features can vary +/- 1/4" vertically and +/- 1/8" horizontally. 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 +/- 3/16" 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 1/4" clear area is required between the print area and the factory seal, A minimum 1/4" clear area is required between the print area and the side seals and header seals. **PRINT CANNOT GO ALL THE WAY TO THE SEALS UNLESS IT IS AUTOGRAFIX PRINT.** Autografix plate break is .375" +/- .25" based on cylinder availability. Wrap-around print allows us to extend the print through the sides seals only – a clear area is still required by the factory seal and open end of the bag based on machine clear sealing areas below.

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) **HB85** – requires .75" clear sealing area
AB180, AB145, AB255, HS100 Excel, HS211 Excel - requires 1.25" Clear sealing area
FAS Millenia – requires 2.75" clear sealing area
 Any machine with a **BLT TRIMMER** requires a 2" clear sealing area at the open end.

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.

BAG SKIRTS:

All Autobag® poly bags will have a skirt. The standard skirt extends 1/4" (+/- 3/16") beyond the factory seal. Other skirt sizes must be specified clearly.

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. 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)



APS COMPUTER EQUIPMENT AND APPLICATION INFO SHEET

Art Department • 13555 McCracken Rd. • Garfield Heights, OH 44125 • 1-330-528-2462

We hope this information will help you in preparing your artwork on the Macintosh computer in the future. We are equipped to prepare Macintosh files for flexographic printing using your Mac files. We will be glad to get you started by making you a template of the bag size you are ordering showing the available art area. Please call the phone number at the top of this page or see our sales person for further details.

PLEASE: Provide a MACINTOSH file AND a COLOR PRINT of your Graphics.

Email can be used to receive most types of files from customers and to send pdf proofs that don't require a color ink swatch to be approved by the customer. However, a full size color printout is still needed and should be sent unless the art will be emailed. If the art will be emailed or placed on the ftp site, please send a pdf for comparison and accuracy.

The Macintosh applications we use are: Please call for latest version available.



Adobe
ILLUSTRATOR



Adobe
PHOTOSHOP



QUARK
Express

- We CANNOT use WINDOWS FONTS.
- We can convert SOME WINDOWS files.
- If you use Corel Draw, you MUST save the file as a "MACINTOSH-Adobe ILLUSTRATOR" file and convert the fonts to shapes or paths.

Current Equipment, email, and ftp info:

Macintosh: Mac Pro computers

Art Department email: artdept@autobag.com

FTP site: ftp.autobag.com user:artftp password: art\$stuff
(If you are uploading to the ftp site, please send the art dept. a notification email.)

Digital Art Information Form

Providing the information requested below for all digital jobs submitted to Automated Packaging System's Art Department, will help us process your graphics. It also reminds you to include ALL supporting art (EPS's, Tiffs, etc.) and fonts that were used to create the graphics for output.

<u>Files</u>	
Name: i.e. "Sample Bag Front"	Type: i.e. Illustrator
Name:	Type:
Name:	Type:
Name:	Type:
	Type:

<u>Supporting Art Files</u>	
Name: i.e. "Graphic Front.eps"	Type: i.e. Adobe Illustrator EPS
Name:	Type:
Name:	Type:
Name:	Type:

<u>Fonts</u>
Please list ALL fonts used in files:

Please provide a COLOR print or PDF of graphics along with your files.

<u>Contact for Questions:</u>	<u>Special Notes</u>
Name: _____	_____ _____ _____ _____ _____ _____
Company: _____	
Address: _____	

Phone: _____	
email: _____	

FAQ's

QUESTION: WHY DOES MY BAG SIZE HAVE TO BE LONGER THAN THE FINISHED SIZE?

ANSWER: To accommodate the Clear Seal Area required by your Autobagger after the product is loaded.

QUESTION: WHY CAN'T MY TYPE BE SMALLER?

ANSWER: The light sensitive characteristics of a Photopolymer Plate only allows a certain minimum spec for clean and legible Reverse and Positive print. The spec for REVERSE print type is 6 POINT BOLD and 1-1/2 POINT FOR LINES. The spec for POSITIVE type is 5 POINT REGULAR SANS SERIF and 1 POINT FOR LINES. To better visualize Reverse and Positive print along with their specs, please see page 9 in this Art Guideline Manual.

QUESTION: WHY DOES THERE HAVE TO BE 1/4 INCH CLEARANCE ON THE LEFT AND RIGHT SIDE OF MY BAG AND ALSO 1/4 INCH CLEARANCE ABOVE AND BELOW THE MANUFACTURER'S SEAL?

ANSWER: Our manufacturing process in the converting of the printed sheet film to bags has tolerances that can drift from left to right and up and down. This could cause for the print to be out of center and seals that could seal over the print.

QUESTION: CAN YOU PRINT PROCESS COLOR ON POLYPROPYLENE?

ANSWER: Yes. However, a polypropylene white ink must be laid down first. Also keep in mind that the white underlay must be extended beyond the entire image.

QUESTION: CAN YOU PRINT A BAG WITH PROCESS COLORS USING AUTOGRAFIX INKS?

ANSWER: No. Currently there are no Autografix process color inks available.

QUESTION: WHY DO I NEED TWO WHITES WITH AUTOGRAFIX INK FOR UPC CODES?

ANSWER: When UPC codes are printed by Automated Packaging Systems, two layers of white are necessary due to the fact that the intensity of the Autografix white is not as high as our standard white.

QUESTION: WHY DOES THE ART DEPT SOMETIMES INDICATE AN INK NUMBER ON MY PROOF OTHER THAN MY SPECIFIED PMS COLOR NUMBER?

ANSWER: APS formulates our own ink. Our coding system does not allow us to use PMS numbers for our formulas.
NOTE: OUR INK LAB NEEDS TO KNOW THE APPLICATION AND CONTENTS OF THE BAG TO ALLOW THEM TO MATCH TO THE PROPER INK SYSTEM.

QUESTION: WHAT IS STEP AND REPEAT?

ANSWER: STEP and REPEAT is multiple images of the same color on one plate. Based on the number of colors in the art, the entire set of images are then assembled together by a special means to provide excellent registration for the Platemaking, Mounting and Printing process.

QUESTION: WHY DOES THE UPC HAVE TO PRINT IN ONE DIRECTION?

ANSWER: UPC and all barcodes must print in the direction the press is running so that the LINES in the code are as straight as possible. If they printed opposite of the press direction of print, they would print wavy and most likely, unscannable. This is a flexographic printing standard.

QUESTION: WHAT KIND OF DIGITAL ART FILES DO YOU ACCEPT?

ANSWER: We accept Macintosh files from Adobe Illustrator and Quark Xpress. We also must have the supporting art (placed images) as "eps" or "tifs" from Adobe Photoshop @ 300 dpi for Process images and at least 600 dpi minimum for line art images 100% size. We can use some PC files if they were created in one of the above programs, but we cannot use windows fonts.

QUESTION: WHY CAN'T YOU E-MAIL ME THE ART PROOF?

ANSWER: (On jobs that we need to send color swatches) We don't email or fax arts for approval that need color swatches because the prints are not accurate to the colors that will print on the press. Our ISO procedures require us to show the actual printed ink on poly material.

QUESTION: WHY DOESN'T THE PRINTED PROOF MATCH THE PMS COLORS I ASKED FOR?

ANSWER: The printed paper proof will not match the actual ink that will be printed. This is why we include the actual printed ink on poly swatches with the proof for approval.

QUESTION: WHY DO I NEED A SPEC SHEET FOR SUCH A MINOR REVISION?

ANSWER: Our ISO instructions require us to follow certain procedures which are most accurate and quality minded to make sure revisions are made and old art destroyed. Even minor revisions of an art that has already been approved.

QUESTION: WHAT DO I DO WITH A "CAD" DRAWING OR BLUEPRINT IF I HAVE ONE?

ANSWER: It is very important that you send drawing(s) in with the Spec sheet or directly to the Graphics Customer Service Team for review.

QUESTION: WHY DO THERE HAVE TO BE "HOLDING LINES" AROUND MY ART?

ANSWER: "Holding lines" are placed around certain art/type that is made up of TWO or more colors printing over each other. This "holding line" will hide any registration problems that could occur.

QUESTION: WHAT ARE LINE, SCREEN, AND PROCESS ART TYPES

ANSWER: Line print is art that prints in solid colors (no gradations or screens). Screen print has art that uses dots to print gradations, tints, and halftones (110 dots per inch). Process print uses Yellow, Magenta, Cyan, and Black inks screened over the top of each other to create a "full color" photo or art that looks like it is printing with more colors than just the 4 - CMYK.

QUESTION: WHAT IS AUTOGRAFIX PRINT?

ANSWER: Autografix print is artwork (usually a block) that prints off the boundaries of the bag giving it a full coverage "colored poly bag" look. It uses special inks that allow us to seal through them.

QUESTION: WHAT IS A "TRAP"?

ANSWER: A trap will be made when at least 2 colors that meet and overlap one another to help in registration problems on press.

QUESTION: WHAT IS THE CURRENT "REV LEVEL" OF A PRODUCT?

ANSWER: The current "Rev level" is the latest revised version submitted by the customer for changes to be made to their existing art. We must go to the QA files to retrieve the information.

QUESTION: CAN WE MAKE A SPECIAL BAG AND SPECIAL FEATURES?

ANSWER: Special bags or features must be Pre-Approved by manufacturing.

QUESTION: HOW SOON CAN I GET MY REVISED PROOF?

ANSWER: For non-process arts the requested revision will be placed in our schedule for a new promise date of three days from the date that we received them. The revisions need to be stated on the Art Approval Form and faxed or emailed to the Art Dept. Also, please fax us a copy of the proof for clarification of the edits. We will try to provide you a new proof sooner, but please keep in mind that we have other customer proofs in our promised schedule.

QUESTION: WHAT ARE THESE INK SWATCHES FOR?

ANSWER: Those are ink swatches of the actual colors of ink that will be used for printing your bag. As it states on your Art Approval Form, you must review the swatches and approve the color. The art proof is for position only.

QUESTION: WHAT IS THIS "ART PROOF APPROVAL SHEET"?

ANSWER: This is the form that we send with all art proofs that requires your signature, date, requested revisions or whatever the case may be as stated on the bottom section. This form is a part of our ISO Quality Records and we cannot process your art without your completion of this form. Please review the entire form before signing and please adhere to any warning notes implied by the artist. This section is located near the top. There is also an area near the bottom for any comments that you may wish to add.

QUESTION: WHY DID YOU MODIFY MY ART AND WHO GAVE YOU PERMISSION?

ANSWER: The modification to your art was made to meet our manufacturing specifications and tolerances and to provide you with a proof as soon as humanly possible. It is always the intentions of Automated Packaging Systems, Inc. to make sure that when your bags are delivered to you, they will meet all manufacturing and customer quality standards. Should you not wish to accept these modifications, please let us know and our Graphics Customer Service Team will put the art on hold until they can again review the situation with our Manufacturing Dept.

QUESTION: HOW CAN I GET MY PROOFS FASTER THAN THE THREE DAY GUIDELINE?

ANSWER: The Art Dept. continually monitors our schedule of promised proof deliveries. Our customer proof turnaround time is 3 days after we receive the customer approved ART QUOTE and PURCHASE ORDER NUMBER. We will do all that we can to accommodate an expedite which is based on the volume of current art proofs in the queue.

QUESTION: CAN YOU MAKE DO WITH THE ART THAT IS BEING SUBMITTED TO YOU? (BUSINESS CARD- YELLOW PAGES-OR VERY POOR COPY).

ANSWER: We will try to complete the art with what we have but the customer logo may not fully represent the customer's expectation. Also be aware of excess labor and cost to perform these tasks.

QUESTION: HOW LONG WILL IT BE BEFORE I RECEIVE MY ART PROOFS AFTER ALL PROPER DOCUMENTATION IS RECEIVED?

ANSWER: Our standard turnaround times for delivering art proofs to customers is 3 Days (4 days for process arts). However, should we receive a vast amount of arts from the same customer, we will notify the Automated Sales Rep or Distributor that we will prolong the 3 days on a basis that will allow us to process at least 4 of the proofs at a time. This enables us to continually process all customer arts depending where they are in the queue.

QUESTION: WHAT CAN I DO TO AVOID HOLDUPS WITH THE PROOFING PROCESS OF MY ART?

ANSWER: Try to provide us with complete artwork using the digital applications as specified in this manual. Also, please provide a color print of what is actually on the disk or a pdf. There have been many times that as the graphic designers build the art and copy it to a disk, fonts can be missing, files lost, etc. By providing a color proof or pdf of what is on the disk or what is being emailed, the customer's artist will notice any discrepancy. We will always send an Art Approval Form with the Art Proof. Please review the proof paying close attention to any notes or warnings from the Automated artist that may hinder the final quality of your printed bags. The fastest way for Automated Packaging Systems' Art Dept. to begin the process of activating your art is to fax or email the Art Approval Form back to us as soon as possible.

QUESTION: WHAT DO YOU MEAN BY "SLUG"

ANSWER: As we receive an art and it has been reviewed to meet all manufacturing requirements, it is then loaded into our main computer system and given an art number that is directly associated with the customer name. At the same time it is also designated as SLUG 1. The Slug identifies the Art. It may reference a UPC code number, part number, form number, name of the product or whatever the identifier may be. That slug number will always remain as the identifier. The only reason that the slug number will change is if the customer requests a revision to that particular art. In this case, the old slug number will be inactivated and a new slug number will be assigned. In the case of an addition to the identifier of that particular art, an additional slug number will be added. See the following example:

NEW ART RECEIVED HAVING 3 COLORS OF WHITE, RED AND BLUE.

WHITE = UNDERLAY for RED and BLUE.

RED = A PAIL

BLUE = TYPE that describes the capacity of the PAIL -- 3 LBS Part No. 12345 UPC code 7 12458 65847 0

SLUG 1 will always be identified as: 3 LBS Part No. 12345 UPC code 7 12458 65847 0.

Customer decides to discontinue that particular PAIL and replaces it with a 5LB PAIL.

WHITE = Remains UNDERLAY for RED and BLUE.

RED = A PAIL

BLUE = TYPE that describes the capacity of the PAIL -- 5 LBS Part No. 12372 UPC code 6 12748 65848 0

SLUG 1 will now be DESTROYED and the identifier will be SLUG 2.

Customer decides to keep the 3 LB PAIL because business was so good and now wants to ADD a 5 LB PAIL

WHITE = UNDERLAY for RED and BLUE.

RED = A PAIL

BLUE = TYPE that describes the capacity of the PAILS -- 3 LBS Part No. 12345 UPC code 7 12458 65847 0
5 LBS Part No. 12372 UPC code 6 12748 65848 0

SLUG 1 will always be identified as 3 LBS Part No. 12345 UPC code 7 12458 65847 0.

SLUG 2 will always be identified as 5 LBS Part No. 12372 UPC code 6 12748 65848 0.

A VERY IMPORTANT REMINDER TO OUR CUSTOMERS. Please be sure that you will NEVER AGAIN use a previous slug before informing your Automated Sales Rep to "REVISE AND REPLACE". We have experienced in the past where customers did in fact ask that a slug be REPLACED and actually were sorry at a later date. They had to again REPAY for art charges for something that they already paid for. It is so easy to add a slug as you will be notified as to the entire Item Number for placing the correct order of bags. When the Art Dept. receives the request to "REVISE AND REPLACE", we destroy all negatives and plates upon approval of the new art to insure that our Manufacturing Dept. does not retrieve the wrong plates resulting in the delivery of incorrect bags.

SLUGS MAY CONSIST OF ONE OF THE FOLLOWING CATEGORIES:

- | | |
|---------------------|-----------------------------------|
| 1) ONE PLATE change | 3) ONE PLATE AND ONE COLOR Change |
| 2) ONE COLOR change | 4) TWO PLATE changes |
| | 5) TWO COLOR changes |

THERE IS A PRESS SET-UP CHARGE PER SLUG ADDED TO ALL BAG INVOICES.

If you have any questions regarding the configuration of slugs or any questions on graphics, please call a Graphics Customer Service Representative at 330-528-2000 or email them at graphics@autobag.com