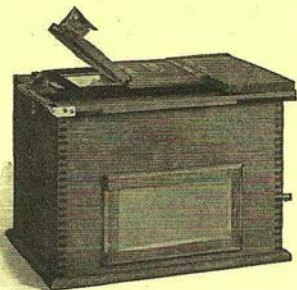


The VELOX BOOK



Kodak Amateur Printer



A PRINTING light, darkroom light, automatic masking device and printing-frame—all in one—a compact, quick and convenient contact printer for negatives from $1\frac{5}{8} \times 2\frac{1}{2}$ to $3\frac{1}{4} \times 5\frac{1}{2}$ and 4×5 . Electrically lighted.

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

Velox

VELOX is a developing-out paper that will give the best obtainable print from any negative. It has distinctive qualities of its own and should not be confused with any other paper. Many improvements have been made in its manufacture, and today Velox is the perfected product of years of experiment.

The various degrees of contrast and the two surfaces in which it is manufactured enable you to bring out the best in a negative, and they correct errors in exposure or harsh lighting contrasts, by subduing or strengthening the contrasts of the negative in the print.

For your protection and so that you may know that you have genuine Velox, the name "Velox" is printed faintly on the back of every sheet.

Surfaces and Degrees of Contrast

VELOX is made in two surfaces on white stock, and in six degrees of contrast. The surfaces are:

E—a semi-matte surface, giving prints of splendid quality and rich tone.

F—a glossy surface, best for obtaining the most detail.

Degrees of Contrast and Their Use

VELOX is made in six degrees of contrast, enabling you to use the degree of contrast that is best suited to each particular negative. These con-

trasts are designated by the numbers 0, 1, 2, 3, 4, and 5, and are further identified by a color band across the package label: Gray for No. 0; red for No. 1; green for No. 2; yellow for No. 3; blue for No. 4; and brown for No. 5.

The proper use of each degree of contrast is as follows:

Contrast No. 0—for excessively contrasty negatives.

Contrast No. 1—for negatives that have great contrast, or when soft effects are required.

Contrast No. 2—for average or normal negatives which have good contrast between high-lights and shadows (dark and light parts).

Contrast No. 3—for thin, weak, and flat negatives that have little contrast.

Contrast No. 4—for very thin, weak, and extremely flat negatives. Also when considerable contrast is desired in the print.

Contrast No. 5—for excessively flat negatives which may be very thin or very dense.

The illustrations on pages 4, 5, 6, and 7 will help you to select the degree of contrast best suited to your negatives. If the negative is thin, weak, or flat, and looks similar to Figure I, make a print on Contrast No. 3, No. 4, or No. 5, or, better still, make a print on each contrast and compare them.

If your negative has strong contrasts similar to Figure IV, make prints on Contrasts No. 0, No. 1, and No. 2, and you will readily see which contrast is best suited to the negative.

Figures II and V show the result of not using the correct paper. A little study of the illustrations and a few trial prints will soon enable you to make a

quick and accurate selection of the best contrast for each particular negative.

An overexposed and overdeveloped negative (difficult to illustrate) is very flat and dense all over, needing a comparatively long exposure to the printing light. Contrast Velox No. 3, No. 4, or No. 5 should be used for such negatives.

Our illustrations do not show a correctly exposed or normal negative; the contrast between the highlights and shadows of such a negative would be between those shown in Figures I and IV, and it should be printed on Contrast No. 2 Velox.

Making the Prints

WHILE Velox prints can be made successfully by daylight, we strongly advise the use of artificial light. It is much more uniform and is better controlled, and therefore it is easier to produce consistently good prints. If daylight has to be used, a window facing north should be selected, if possible, as the light from this quarter is more uniform.

Velox is very sensitive to *white* light and should be handled in a subdued or yellow light to keep it from being fogged. If prints are made in the daytime, the window shades must be drawn to darken the room sufficiently for safety.

Testing the Light

TO test the light for safety, place an unexposed sheet of Contrast No. 0 Velox, emulsion side up, on your worktable, in the same position that the developer tray will occupy; cover one half of it with cardboard and let the other half remain uncovered for two minutes; then develop it, face down, for forty-five seconds. If the half that was uncovered turns gray or black while the covered half remains white, it is a sure indication that your working light is too

(Continued on page 8)



FIG. I

FIG. I—A thin, weak, or flat negative, with little contrast between high-lights and shadows. It should be printed on Contrast No. 3 or Contrast No. 4 Velox. If the negative is excessively flat, use Contrast No. 5 Velox.

FIG. II—Result of printing from a weak, thin, or flat negative (Fig. I) on Contrast No. 1 Velox. The *wrong* paper for such a negative.

FIG. III—A print on Contrast No. 3 Velox from negative shown in Fig. 1. The *right* paper for a weak, thin, or flat negative. Contrast No. 4 Velox is for *extremely* flat and very thin, weak negatives. Contrast No. 5 Velox is for *excessively* flat negatives which may be very thin or very dense.



FIG. II



FIG. III

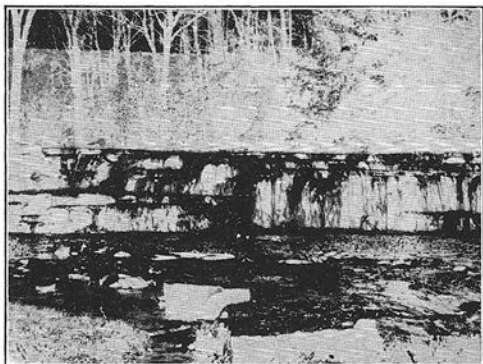


FIG. IV

FIG. IV—A negative of strong contrasts. It should be printed on Contrast No. 1 or Contrast No. 2 Velox. If the negative is *excessively* contrasty, use Contrast No. 0 Velox.

FIG. V—Result of printing from a negative of strong contrasts (Fig. IV) on Contrast No. 4 Velox, showing very little detail in the high-lights. The *wrong* paper for such a negative.

FIG. VI—A print on Contrast No. 2 Velox from negative shown in Fig. IV, the *right* paper for a negative of good contrast; also suitable for the average or normal negative. Contrast No. 1 Velox is for negatives of *extreme* contrast. Contrast No. 0 Velox is for *excessively* contrasty negatives.



FIG. V



FIG. VI

strong. If the entire sheet remains white, your light is safe. Never handle Velox in a light that will not stand this test.

A light that is too strong can be diffused or subdued by the use of two or three thicknesses of white tissue paper, or one thickness of post-office paper. When printing, it is advisable to place a sheet of yellow or orange paper between the printing light and the developer tray.

Where electricity is available a Brownie or a Kodak Safelight Lamp, with a Series 00 Safelight, will provide ample working light that is quite safe.

In the following instructions it will be understood that artificial light is to be used for printing. An oil lamp can be used, but owing to its decidedly yellow light, a considerably longer exposure will be required.

Comparative exposures when using Contrast No. 2 Velox with an average or normal negative, and with various lights, are as follows:

Distance from Light	60-watt Lamp	40-watt Lamp	25-watt Lamp	Welsbach Burner (Gas)	Average Oil Lamp
8 Inches	4 Seconds	9 Seconds	17 Seconds	21 Seconds	90 Seconds

With Contrast No. 0 or No. 1 Velox make a slightly shorter exposure, and with Contrast No. 3, No. 4, or No. 5 Velox increase the exposure. A shorter distance between printing light and negative reduces the exposure.

This table is only approximate, as variations in light and densities of negatives make it impossible to give definite figures. It will serve, however, as a guide to correct exposure. One definite rule to follow is: *Velox of both surfaces and all degrees of contrast must be exposed so that it develops to the correct depth in about forty-five seconds, at 70 degrees Fahr. (21° C.).*

Printing Requisites

THE necessities for making Velox prints are few in number and inexpensive. In addition to a suitable printing light and water for rinsing and washing the prints, the following articles should be procured:

Three trays, preferably enameled iron, at least one size larger than the negatives to be printed.

A four- or eight-ounce graduate.

A bottle of Nepera Solution or other developer (see page 14).

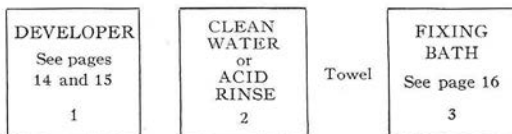
A package of Kodak Acid Fixing Powder, or a bottle of Velox Liquid Hardener and a pound of Granular Hypo.

A thermometer—an Eastman Stirring Rod Thermometer will be found convenient.

One printing frame and glass to fit, and

A package each of Contrast Nos. 0, 1, 2, 3, 4, and 5 Velox paper.

Arrange the trays in the order below, making up the developer and fixing bath from the instructions given on pages 14, 15, 16, and 17.



Direct rays of the printing light must not reach the developer tray (No. 1). A piece of yellow or orange paper can be placed between the light and tray No. 1 to make the light safe, and prevent the paper from being fogged during development.

Put the solutions into trays Nos. 1 and 3, with the tray of clear water and a clean towel between them. Use plenty of solution, especially of the fixing bath, and if making five or six dozen $3\frac{1}{4} \times 5\frac{1}{2}$ -size prints, use a full quart, but do not keep it after using; a fresh bath will give best results. If a larger number of prints are made, use a stop bath (page 15) in tray No. 2.

Temperature is an important factor, and for the best results the developer should be kept at 70 degrees Fahr. (21° C.), and the fixing bath and wash water should not exceed 70 degrees Fahr. (21° C.). Should the developer exceed 70° Fahr. (21° C.), the emulsion is liable to soften and the prints fog. If it is too cold, chemical action is slowed down, resulting in flat, weak prints. A warm fixing bath will not harden the prints, and it may turn milky, leaving a deposit on the prints.

Making the Exposure

LAY the negative upon the glass of the printing frame, shiny side down, and place the sensitized side of a sheet of Velox face down on the negative (the trade name VELOX is printed faintly on the *back* of every sheet of Velox). The paper has a slight curl, and the emulsion is on the inside. Replace the back of the printing frame and fasten it. If white margins are desired, a mask of black or opaque paper with an opening slightly smaller than the negative should be placed between the glass and the negative, or between negative and sheet of Velox (see page 19).

Hold the printing frame towards the light at a distance slightly more than the diagonal of the negative, about seven or eight inches for the $3\frac{1}{4} \times 5\frac{1}{2}$ -inch size, or four inches for a $1\frac{5}{8} \times 2\frac{1}{2}$ -inch or miniature negative, and make the exposure, according to the table on page 8.

Trial Strips

WE suggest that before making your first full-size print, you cut a sheet of Velox into strips about an inch wide. Place one of them across the most interesting part of a negative and make a trial exposure. Develop it for forty-five seconds and if it is too light or too dark, try another strip, increasing or decreasing the exposure as indicated. When the correct exposure is found you can make any number of similar prints from the same negative if the exposure, distance from light, and time of development remain unchanged. Comparing other negatives with the one you have tested will enable you to make a fairly accurate estimate of the exposures required.

Development

REMOVE the exposed paper from the printing frame and immerse it immediately, *face up*, in the developer, covering it quickly and evenly with the solution. In a few seconds the image will begin to show, and if the exposure has been correct, it will be *fully developed in about forty-five seconds*. If your print takes more or less time to develop fully, the exposure should have been longer or shorter, respectively.

Fixing

AS soon as the image reaches the desired depth, remove the print from the developer, and rinse it five to ten seconds in clear water or the acid rinse bath (Tray No. 2), turn it once or twice, then put it into the fixing bath (Tray No. 3). Keep the print moving for three or four seconds after placing it in the fixing bath. *When there are several prints in the bath they should be moved about occasionally to make sure of even and complete fixing, and to prevent stains and other troubles.* Leave the prints in the fixing bath for at least *fifteen minutes* before transferring to the washing tray.

Washing

WHEN the prints are fixed, remove them, one at a time, from the fixing bath to a tray of clear water. To remove completely all traces of hypo, the prints must be washed for about one hour in a tray into which a constant stream of water is running. Prints should be separated several times during this period. If running water is not available they must be washed in ten or twelve changes of water, allowing five minutes for each change. This is best done by using two trays, transferring the prints, one at a time, from one tray to the other and refilling with fresh water.

Prints will not wash free from hypo if they are piled in a heap in a tray, and the water simply runs in at one end and out at the other. Whether washed by running water or by ten or twelve changes, the prints must be kept separated to allow the fresh water to reach both sides and remove all of the hypo.

If running water is used, the stream must not be allowed to fall directly on the prints or it may break the fiber of the paper. Place a graduate or tumbler in the tray and let the water run into it and overflow into the tray. We recommend the Eastman Automatic Tray Siphon as the most efficient means for washing prints in the shortest possible time.

Prints should not be washed longer than is necessary to free them entirely from hypo. This will be done if either of the methods outlined is faithfully carried through. Washing is equally as important as developing and fixing, and should receive the same careful attention for the best results.

Hypo Test

TO know when prints are thoroughly free from hypo, we recommend the following:

Hypo Test (*Formula HT-1a*)

	Avoir.	Metric
Potassium Permanganate	4 grains	0.3 gram
Sodium Hydroxide (Caustic Soda)	8 grains	0.6 gram
Water (distilled) to make	8 ounces	250.0 cc.

To make the test, take four ounces (125 cc.) of pure water in a clear glass and add one-quarter dram (1 cc.) of the Hypo Test solution. Pour one-half ounce (15 cc.) of the diluted solution into a clean one-ounce graduate or similar container. Take six prints $3\frac{1}{4} \times 5\frac{1}{2}$ or equivalent from the wash water and allow the water from them to drip for 30 seconds into the one-half ounce of test solution.

If a small percentage of hypo is present the violet color will turn orange in *about 30 seconds*, and become colorless in about one minute. In such case the prints should be returned to the wash water and allowed to remain until further tests prove that the hypo has been eliminated. This is shown by the violet color remaining unchanged when drippings from the prints are added to the Hypo Test solution.

Drying

WHEN the prints have been thoroughly washed, place them in a pile, face down, on a clean sheet of glass and press out the surplus water; then lay them, one at a time, face down, on a clean, uncolored cloth, or a white towel free from lint. Never dry prints between ordinary blotters or on paper, as they may stick and be damaged.

We recommend the Kodak Photo Blotter Roll as the most satisfactory and convenient method of drying prints except the F Velox (glossy), which should be dried either on ferrotype plates or face down on a clean, white cloth. The Kodak Photo Blotter Roll consists of a cloth-surfaced blotter, a plain blotter and a corrugated cardboard. The damp prints are laid face down on the cloth-surfaced blotter, covered with the plain blotter, rolled up in the corrugated cardboard and fastened with string or a rubber band.

The roll may be stood on end on the top of a radiator or hot air register where the prints will dry very quickly in winter. In summer the roll should be laid on its side with one end facing an open window. Prints dried in the roll come out smooth and have a slight outward curve.

Notes on Development

VELOX requires a special developer and should not be developed with one made for film and plate development only. Owing to the difficulty that many have in securing pure chemicals, and the trouble and subsequent loss of material by those attempting to compound their own developers, we recommend the use of our prepared liquid developer—Nepera Solution. If it is desired to use a powder form of developer, which is prepared by dissolving in a specified quantity of water, Eastman MQ Developer Tubes or the Eastman Universal Developer is recommended.

MQ Developer should be dissolved in 6 ozs. water.
 Universal “ “ “ “ “ 12 ozs. “

Nepera Solution

NEPERA Solution is a concentrated developer prepared from pure chemicals. It is made especially for Velox paper and produces the finest results.

This developer should be prepared in the proportion of one part of Nepera Solution to three parts of water.

For those who prefer to make their own solutions the following formula is recommended:

Elon-Hydroquinone Developer (*Formula D-72*)

	Avoir.	Metric
Water (about 125° F.) (52° C.)	16 ounces	500.0 cc.
Elon	45 grains	3.1 grams
Sodium Sulphite, desiccated (E.K.Co.)	1 ½ ounces	45.0 grams
Hydroquinone	175 grains	12.0 grams
Sodium Carbonate, desiccated (E.K.Co.)	2 ¼ ounces	67.5 grams
Potassium Bromide	27 grains	1.9 grams
Cold water to make	32 ounces	1.0 liter

Dissolve chemicals in the order given, and for use add two parts of water to one part of the stock solution. Develop prints for 45 seconds at 70 degrees Fahr. (21° C.).

It is important that the temperature of the developer be kept at 70 degrees Fahr. (21° C.). When it is necessary to cool the developer, do not put ice into the solution, as this will dilute it. Place the tray in a larger tray with cracked ice or cold water around it.

The above stock solution will keep for several months in bottles filled to the neck and tightly corked.

Tropical Development

SPECIAL instructions for the handling of Velox and other papers in extremely hot weather are given in our booklet, "Tropical Development," a copy of which will be sent free on request.

Acid Rinse Bath

WHEN a large number of prints are to be made, we recommend that they be rinsed at least five seconds between developing and fixing, in an acid rinse bath, as its action instantly checks development and prevents uneven spots and streaks when the prints are immersed in the fixing bath.

A fresh bath should be mixed each time and then discarded, as the acid in an old bath will become neutralized by the alkali carried over from the developer.

Acid Rinse Bath (*Formula SB-1*)

	Avoir.	Metric
Water.....	32 ounces	1.0 liter
*Acetic Acid (28% pure) (E.K.Co.)	1½ fluid ozs.	48.0 cc.

*To make 28% acetic acid from glacial acetic acid, add 3 parts of glacial acetic acid to 8 parts of water.

Notes on Fixing

TO secure permanency, prints must be fixed in a fresh acid fixing bath at a temperature *not exceeding 70 degrees Fahr. (21° C.)*. Probably more

prints change color from insufficient fixing than lack of washing, and it is important that these directions for fixing be carefully carried out.

Use plenty of solution and leave prints in the fixing bath for *at least fifteen minutes*.

Always use an acid fixing bath, as this will overcome any tendency of the bath to cause streaks and stains. Move the prints about for the first three or four seconds after immersion. Separate and move them occasionally during the time of fixing, to avoid stains and other troubles.

Never fix Velox in a bath that has been used to fix films or plates.

Kodak Acid Fixing Powder is supplied in packages of various sizes. We recommend its use as the most convenient and easily prepared fixing bath. Directions for preparing are given on each package.

For those who prefer to mix their own fixing bath, the following formula is recommended:

Acid Hardening Fixing Bath for Papers **(Formula F-1)**

	Avoir.	Metric
Sodium Thiosulphate (Hypo) . .	16 ounces	480.0 grams
Water	64 ounces	2.0 liters

When the hypo is dissolved completely, add four ounces (125 cc.) Velox Liquid Hardener or the following hardening solution:

	Avoir.	Metric
Water (about 125° F.) (52° C.) . . .	5 ounces	160.0 cc.
Sodium Sulphite, desiccated (E.K.Co.)	1 ounce	30.0 grams
*Acetic Acid (28% pure) (E.K.Co.)	3 fluid ozs.	96.0 cc.
Potassium Alum (E.K.Co.)	1 ounce	30.0 grams

***To make 28% acetic acid from glacial acetic acid, add 3 parts of glacial acetic acid to 8 parts of water.**

Dissolve the chemicals in the order given, using water at about 125° Fahr. (52° C.). The sodium sulphite must be dissolved completely before the acetic acid is added. After the sulphite-acid solution

has been mixed thoroughly, add the potassium alum and stir until dissolved completely.

Add the hardening solution, cooled to about 65° Fahr. (18° C.), slowly to the cool hypo solution, stirring continually. This solution will keep several weeks if placed in tightly corked bottles and stored at a temperature not higher than 75° Fahr. (24° C.). Sixteen ounces (500 cc.) of solution will fix one-half gross of 3¼ x 5½ prints or their equivalent if an acid rinse is used after development, or thirty-six prints if only a water rinse is used.

F Velox (Glossy)

THE F Velox has a smooth, glossy surface, producing prints with a high gloss, particularly suited to negatives full of detail. This high gloss is produced by the method in which the paper is dried. After removing the prints from the wash water, they must be squeezed, face down, onto a ferrotype plate and allowed to become bone dry; they will then peel off with a high lustre.

Before using the ferrotype plate it must be specially prepared to prevent the prints from sticking. To do this, dissolve ten grains of paraffin wax (the size of the tip of your little finger) in one ounce of benzine or gasoline and apply a little of this solution on a piece of canton flannel, covering the plate thoroughly and polishing off with a piece of dry flannel. The plate should be washed occasionally with hot water to remove any particles of gelatin that may remain from previous prints.

Mounting the Prints

VELOX prints should be mounted to preserve and display them to the best advantage. They can be mounted dry with Kodak Dry Mounting Tissue, or with photographic paste or glue.

TO MOUNT WITH KODAK DRY MOUNTING TISSUE: Lay an untrimmed print face down and tack to the

back of it a piece of tissue, the same size or slightly larger, by applying the point of a heated flatiron to each end of the tissue. The iron should be just hot enough to melt the tissue, not so hot that it glides nor so cold that it sticks. If too hot, it is liable to discolor the print.

Turn the print face up and trim print and tissue to the desired size, now lay the print in place on the mount or album leaf, cover it with a piece of clean white paper and press the whole surface with the hot flatiron for a few seconds; the time required depends upon the heat of the flatiron. *Press, don't rub.* Prints mounted in this manner will remain flat even on thin mounts.

TO MOUNT WITH PASTE: Trim the dry prints to the required size and put them into a tray of clean water to become thoroughly limp, then pile them, face down, on a sheet of clean glass and squeegee out any surplus water. With a good bristle brush apply a thin, even coat of Kodak or Eastman Photo Paste to the back of the top print. Lift the print by opposite corners and place it in position on the mount. Lay a clean, dry blotter over the print and press into contact with a squeegee or print roller. Lint, fuzz, or surplus paste on the print should be immediately wiped off with a damp cloth or sponge.

TO MOUNT WITH GLUE: To the four corners or around the four sides of the back of a dry, flat, properly trimmed print, apply a small amount of Kodak Liquid Glue, lay the print in position on the mount or album leaf, and press firmly.

Finishing

THE mounted print can often be greatly improved by the removal of any slight blemish or imperfection. This is done with a fine sable or camel's hair brush and Eastman Spotting Colors, which can be

blended to match any tone in the print, and cover up any blemishes.

White Margins

THE Kodak Auto-Mask Printing Frame, also the Kodak Amateur Printer, are especially designed for making prints with white margins.

Kodaloid Printing Masks are made for negatives of all the popular sizes. They are accurately cut and give excellent white margins.

Suitable masks can be made by cutting an opening the size of the desired print, from a sheet of black or opaque paper. The Eastman Mask Charts are closely ruled, and provide an easy and convenient means for making masks of any desired size.

To print, the mask is placed in the printing frame and the negative placed above or below the opening with the back or shiny side of the negative next to the glass. Make sure that the transparent margin of the negative does not appear in the opening of the mask.

A sheet of Velox paper, slightly larger than the opening in the mask, is placed in position, and the back of the printing frame closed. Then proceed with the making of the print as described on page 10.

Sepia Tones on Velox

VELOX can be toned to a permanent Sepia by the use of Velox Re-developer.

Velox prints which have been evenly and thoroughly fixed and washed will give the best results. Landscapes, autumn scenes, and portraits are sometimes improved by the warmth of tone which the Re-developer produces. Some subjects, such as marine and snow scenes, are best rendered in black-and-white.

A tube of Velox Re-developer requires only the addition of water to make a bleaching bath (for bleaching the print before redevelopment) and a redeveloping solution, sufficient for about sixty $3\frac{1}{4} \times 5\frac{1}{2}$ Velox prints, or their equivalent. It is important that the prints should have been *washed thoroughly* so that no trace of hypo remains. For the best results the prints should be dry before redeveloping.

Prepare the bleaching bath and redeveloping solution following the instructions on the tube. Place the black-and-white print in the bleaching bath and let it remain until all trace of black has disappeared from the shadows or until only a faint outline of the image remains (about one minute); it should then be removed and rinsed thoroughly in fresh water, until no yellowness remains in the water. Then place the print in the redeveloping solution, where the faint image immediately changes to a warm brown tone, gradually deepening until all its former brilliancy returns, but changed to a Sepia tone instead of black-and-white. This requires fully thirty seconds.

After redevelopment, rinse the print *thoroughly*, and immerse it in a hardening bath composed of Velox Liquid Hardener, 1 part; water, 16 parts; leave the print in this solution for about five minutes. The print should then be washed for about thirty minutes in running water, or if not available, use two trays and give it six changes of water. The whole process requires only a short time.

Regardless of their age, black-and-white prints can always be redeveloped to a Sepia tone.

Prints with a good bluish black tone, rather than the green or olive tone which is produced by too much bromide in the developer, or overexposure and underdevelopment, will give the best results. Bleaching and redeveloping baths will retain their strength

for some time if kept in well-stoppered bottles, and in a dark place when not in use.

Coloring Velox Prints

THE surface of Velox is particularly well adapted for coloring, and prints are made very attractive through the many beautiful effects obtained by the use of Velox Transparent Water Color Stamps. No experience is necessary when using these colors, and anyone can secure excellent results. Full directions accompany each set of stamps.

They are made in twelve colors, on perforated sheets in book form, and there are twenty-six stamps of each color.

The Velox Water Color Outfit, containing everything necessary for coloring prints, will be found most convenient. The Outfit consists of an Artist's Mixing Palette, three Camel's Hair Brushes and one book of the Velox Transparent Water Color Stamps.

The stamps can also be used for coloring Bromide enlargements, lantern slides, and for all work where careful blending and transparency of color is desired. See price list.

Causes of Nonsuccess

THE following causes of failure will help you to recognize and remedy any small trouble that may arise:

Print is too dark

Overexposure.

Overdevelopment.

Developer too warm, should be 70 degrees F. (21° C.).

Negative too weak or thin.

The wrong degree of contrast may have been used; try Contrast No. 3, No. 4, or No. 5.

Print is too light, lacks detail

Underexposure or underdevelopment; developer too cold, should be 70 degrees F. (21° C.); use Contrast No. 0, No. 1, or No. 2.

Grayish whites over entire print

Chemical or light fog, test the light (see pages 3 and 8).

Insufficient Potassium Bromide in developer.

Too long development.

Old paper.

Grayish mottled or granulated appearance of edges or entire print

Underexposure, forced development. Old paper.

Moisture, paper kept in damp place.

Chemical fumes: Ammonia, Gas, etc.

Greenish or brownish tones, sometimes mottled

Developer exhausted, badly discolored or too cold.

Excess of Potassium Bromide.

Overexposure and underdevelopment.

Brown or red stains

Exhausted or oxidized developer. (Never use developer after it has become much discolored or when too warm.)

Fixing bath lacks sufficient acid (sometimes milky) and prints were not moved occasionally to allow even fixing. (See page 11.)

Purple discoloration (not frequent)

Prints not moved occasionally during fixing.

Round white spots

Air bells on the surface of paper.

To avoid, develop prints face up, immediately brushing off with the finger any air bells that may form. Use sufficient developer to thoroughly cover the prints.

Round or irregular dark spots

Caused by air bells forming on the surface of prints when several are allowed to become matted together in the fixing bath, and failure to move prints about occasionally while in the fixing bath.

White deposits all over surface of print

Milky Hypo bath. Incorrectly mixed or impure chemicals.

Yellowish whites

Stains all over prints are the result of underexposing and forcing development.

Prints not kept moving for the first few seconds after immersion in the fixing bath.

Too weak a developer.

Insufficient fixing and washing.

Iron in wash water—may come from rust in pipes.

Sea air will affect Velox, causing yellow whites. Packages should not be left open, and prints should be developed immediately after exposure.

Velox Glossary

THE following glossary includes some of the technical terms indispensable in describing some of the characteristics of Velox and its manipulation.

Actinic—The "actinic rays" of light are those which produce chemical changes or photographic action.

Concentrated Solution—One in which the chemicals have been dissolved in the least volume of liquid.

Contrasty—Applied to prints meaning hard, "chalky," extremely black shadows and white high-lights; lacking in detail when applied to negatives.

Dense—In a negative, means it has been overexposed, overdeveloped, or both.

Diffused Light—Spread out, not direct—the light coming through ground glass, wax paper, or other translucent medium.

Emulsion—The sensitized coating on paper, or films, which is acted upon by the actinic rays of light.

Exposure—The period of time during which a sensitized surface is exposed to the light.

Ferrotypes Tin, Ferrotypes Plate—Thin plates of highly polished enameled metal used for obtaining a high gloss on F Velox (glossy).

Fixing—Removing the silver salts, which have not been affected by light, from a negative or print, to make the image permanent.

Flat—Lacking contrast, weak, or thin. Applied to prints or negatives.

Fog—Dim, grayish color produced by white light striking the paper before or during development. It may also be caused by an error in the preparation of developer, impure chemicals, or by certain metals, such as tin or copper.

Forcing—Prolonging development of an underexposed print or negative.

Graduate—A measuring vessel for liquids. Nepera Solution and Velox Liquid Hardener are put up in graduated bottles.

Half-Tones—All tones between high-lights and deepest shadows.

Hard—Contrasty, lacking detail; either in negative or print.

High-Lights—Brightest or whitest parts of an image. The denser portions of a negative or the lightest parts of a print.

Hypo—The term used by photographers for sodium thiosulphate. Used for fixing films, plates, and paper; may be obtained in either granular or large crystal form.

Negative—A photographic film which, after it has been exposed and developed, produces an image whose lights and shadows are reversed.

Overdevelopment—More than normal or correct development.

Overexposure—More than normal or correct exposure.

Oxidation—Applied to developer, a deterioration due to the presence of oxygen in the air; turns the developer dark resulting in a discoloration of the print or negative.

Positive—A reproduction of any object in which the lights and shadows are represented as seen in the original—the opposite to a negative.

Precipitate—The solids in a solution which separate and settle to the bottom of a vessel.

Shadows—The thinner or lighter portions of a negative, or the darker portions of a print.

Soft—Lacking brilliancy or contrast. A "soft" print will have all possible detail.

Squeegee—A strip of soft rubber set in a handle, used to squeegee surplus water from prints; also to press them into contact with a ferrotype plate.

Ten Per Cent Solution—Approximately, a solution obtained by dissolving one ounce (by weight) of dry chemical in nine fluid ounces of water; then adding water to make ten fluid ounces of solution.

Thick—(see Dense).

Tone—The shade, hue, or degree of color prevailing in a negative or print.

Underdevelopment—Not sufficient time in developer for correct results.

Underexposure—Too short an exposure for correct results.

Weak—Thin, soft, lifeless, lacking contrast.

Permanency

THE permanency of any Velox print depends upon the thoroughness of manipulation. It is beyond question that, with correct developer freshly prepared and with thorough fixing and washing, Velox prints will be permanent. Many dealers are using sample prints that were sent them years ago and which have been exposed continually to every conceivable atmosphere. That they are today in excellent condition is an unanswerable argument in favor of Velox permanency.

If you are unsuccessful and think that you have defective paper, return the unexposed sheets in the original package, together with a print showing nature of the defect and we will make a test, notifying you promptly as to the reason for your nonsuccess.

Velox found to be defective through fault in manufacture will be exchanged, free of charge, if returned before the expiration date which is stamped upon each package.

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

PRICE LIST OF VELOX PAPER

SIZE	2 Dozen	Gross	
1 $\frac{7}{8}$ x 2 $\frac{3}{4}$	\$.15	\$	.50
2 $\frac{1}{4}$ x 3 $\frac{1}{4}$	.20		.60
2 $\frac{1}{2}$ x 3 $\frac{1}{2}$	.20		.70
2 $\frac{1}{2}$ x 4 $\frac{1}{4}$	.20		.80
2 $\frac{3}{4}$ x 4 $\frac{1}{2}$	.20		.90
2 $\frac{7}{8}$ x 4 $\frac{7}{8}$	.25		1.00
3 $\frac{1}{8}$ x 5 $\frac{1}{8}$	.25		1.15
3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	.25		1.00
3 $\frac{1}{2}$ x 4 $\frac{1}{2}$	.25		1.10
3 $\frac{3}{4}$ x 5 $\frac{1}{2}$	.25		1.25
3 $\frac{1}{2}$ x 5 $\frac{3}{4}$	.30		1.40
4 x 5	.30		1.40
4 x 6	.35		1.60
	1 Doz.	$\frac{1}{2}$ Gross	Gross
5 x 7	\$.25	\$1.25	\$2.35
6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	.40	2.00	3.65
7 x 11	.50	2.70	5.00
8 x 10	.55	2.80	5.20

Other sizes at proportionate prices.

Price List

Nepera Solution (see page 14), 4-oz. bottle.....	\$.28
16-oz. bottle.....	.84
Eastman MQ Developer , in glass tubes, each.....	.06
Carton of five tubes.....	.30
Eastman Universal Developer Powders , in glass tubes, each.....	.07
Carton of five tubes.....	.35
Kodak Acid Fixing Powder , one-pound package....	.25
Half-pound package.....	.15
Quarter-pound package.....	.10
Velox Liquid Hardener , 8-oz. bottle (sufficient to acidify 8 pints of Hypo solution).....	.35
4-oz. bottle.....	.25
Velox Re-developer , carton of 12 tubes.....	1.08
Sodium Carbonate, desiccated (E.K.Co.) , 1-lb. bottle.....	.35

Sodium Sulphite, desiccated (E.K.Co.), 1-lb. bottle	\$.39
Elon, 1-oz. bottle.....	.43
Hydroquinone, 1-oz. can.....	.20
Potassium Bromide, 1-oz. can.....	.12
Acetic Acid (28% pure) (E.K.Co.), 1-lb.....	.30
Hypo, granular, 1-lb.....	.18
Potassium Alum (E.K.Co.), 1-lb.....	.16
Ferrotypes Plates	
Heavy, 10 x 14, each.....	.30
Heavy, 14 x 20, each.....	.65
Heavy, 18 x 24, each.....	1.00
Kodak Print Roller, double, 6-inch.....	1.50
Flexo Print Roller, single, 4-inch.....	.35
Eastman Special Squeegee, velvet rubber, 8-inch...	1.25
Eastman Enamel Trays, 4 x 6, each.....	.60
Size 5 x 7, each.....	.75
Eastko Trays, 4 x 6, each.....	.30
Bull's-Eye Trays, Composition, 5 x 8, each.....	.80
Thermometer Stirring Rod.....	1.25
Brownie Safelight Lamp, with Series 2 Safelights, an	
electric darkroom lamp.....	1.75
Extra Circular End Safelight, Series 00 (for Velox)...	.25
Extra Rectangular Safelight, Series 00 (for Velox)...	.40
Kodak Safelight Lamp, with Series 2 Safelight.....	4.00
Extra Safelight, Series 00 (for use with Velox), 5 x 7	.75
Eastko Tumbler Graduate, 2-ounce.....	.20
4-ounce.....	.25
8-ounce.....	.30
16-ounce.....	.55
Eastman Printing Frame	
3¼ x 5½, opens two-thirds.....	.60
4 x 5, opens two-thirds.....	.60
5 x 7, opens two-thirds.....	.75
Kodak Auto-Mask Printing Frame, adaptable to	
4 x 5, 3¼ x 5½ and smaller negatives.....	1.50
Kodak Amateur Printer, adjustable to any size up	
to 4 x 5½.....	12.00

Kodaloid Printing Masks , for use in Eastman Printing frames to produce white margins on prints:	
No. 0 for 1-3/16 x 1-9/16 negatives, each	\$.15
No. 1 for 1 5/8 x 2 1/2 negatives, each	.15
No. 3 for 2 1/4 x 3 1/4 negatives, each	.15
No. 4 for 2 1/2 x 4 1/4 negatives, each	.15
No. 6 for 3 1/4 x 4 1/4 negatives, each	.15
No. 8c for 2 7/8 x 4 7/8 negatives, each	.15
No. 8 for 3 1/4 x 5 1/2 negatives, each	.15
No. 9 for 4 x 5 negatives, each	.15
No. 16 for 1 5/8 x 2 1/4 negatives, each	.15
No. 17 for 24 x 36 mm. negatives, each	.15
Eastman Mask Chart , 5 x 7, one dozen	.15
Kodak Photo Blotter Roll , for drying prints	1.50
Kodak Dry Mounting Tissue	
2 1/4 x 3 1/4, per gross	.25
2 1/2 x 4 1/4, per gross	.30
2 3/4 x 4 1/2, per gross	.30
2 7/8 x 4 7/8, per gross	.30
3 1/4 x 4 1/4, per gross	.30
3 1/4 x 5 1/2, 2 dozen	.15
Per gross	.50
4 x 5, 2 dozen	.15
Per gross	.50
4 x 6, per gross	.70
4 1/4 x 6 1/2, per gross	.75
5 x 7, 1 dozen	.15
Per gross	1.00
Kodak Photo Paste , 1/8-oz. tube	.10
2-ounce tube	.15
Eastman Photo Paste , 4-ounce jar	.25
Kodak Liquid Glue , tube	.15
Eastman Spotting Colors , set of three	.25
Velox Transparent Water Color Stamps , booklet of twelve colors	.50
Velox Water Color Outfit , consisting of Artist's Mixing Palette, three Camel's Hair Brushes, and one book of Velox Transparent Water Color Stamps	1.00
"How to Make Good Pictures," an illustrated book that includes many helpful suggestions	.50

All prices subject to change without notice.

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

EASTMAN TESTED CHEMICALS



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*You're sure if you use
Eastman Tested Chemicals*



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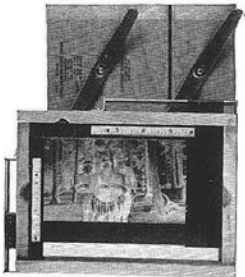
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Easily and quickly adjusted sliding masks frame the negative for any desired white margin or mask off undesirable parts of the negative.

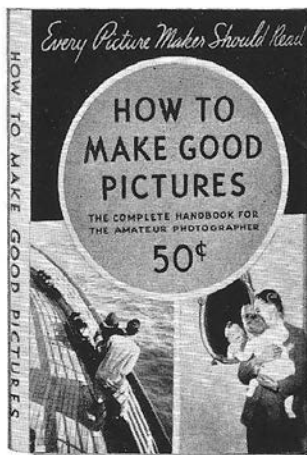


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