

I N T R O D U C I N G

HARVEY™

We provide the colors; you provide the imagination.

HOECHSTETTER PRINTING
AN RR DONNELLEY COMPANY

What is HARVEY?

HARVEY™ is a color selection tool that finally puts the power to select out-of-gamut colors where it belongs: in the hands of designers and color specifiers like you.

HARVEY's colors use between one and four additional plates, depending on the gamut of colors to be reproduced. They print with select inks, on a conventional press, using a stochastic dot. It is a proprietary system, developed at Hoechstetter Printing and named in honor of our founder, Harvey Hoechstetter, who committed his professional life to improving the craft of fine color printing.

To create HARVEY we first had to determine how many points of the new spectrum it would be practical to define. We considered the minimum size of a swatch, the maximum size of a page and how quickly changes in screen value translated into new colors. After some experimentation, we determined 24 steps to be ideal. Each color is discernible from the color above and below it, and there are no significant gaps.

HARVEY consists of grids of these 24 steps in each of our four extra color drivers, overlapping similar grids of cyan, magenta, yellow and black, yielding 2,304 new colors for each additional driver.

Colors from this growing library—over 9,000 so far—can be specified by a unique number in any graphic application and printed as screens in any document, as swatches on any color card, combined in brilliant degradés or introduced seamlessly into any color subject.

When complete, HARVEY will yield approximately 13,000 new colors that are all:

- Distinguishable from one another
- Practical to build and print
- Outside the gamut of conventional 4-color process
- Under the control, at last, of designers and color specifiers

What's so bad about CMYK?

Only a fraction of colors visible to the human eye can be printed by traditional methods. The CMYK ink set is imperfect because the pigments used to make the inks fail to perfectly absorb the colors they are supposed to absorb, and to transmit the colors they are supposed to transmit—a phenomenon called subtractive failure.

If our inks were perfect, we would be printing 3-color process. But solids of cyan, magenta and yellow make a dirty brown. The whole world recognizes that to get a good black on the page we need a black printer.

HARVEY just takes the next logical step, recognizing that just as C + M + Y yields an imperfect black, so does M + Y yield imperfect reds and oranges, C + Y imperfect greens, C + M imperfect blues and purples. HARVEY provides just the right additional pure colorants to fill these gaps in the spectrum.

Because of subtractive failure, process colors, in combination, have a high gray component. Most tint combinations appear dirty or desaturated, and light tints have a tendency to gray out. HARVEY's pure, saturated colors yield thousands of pure mid-tones and pastels impossible to achieve by conventional methods.

Is this a new technology?

The technology is not new. It has been with us for years. What has been missing, until HARVEY, is the tool that gives you, the designer, the power to predict and control the use of this extraordinary palette.

HARVEY's Color Space compared to CMYK

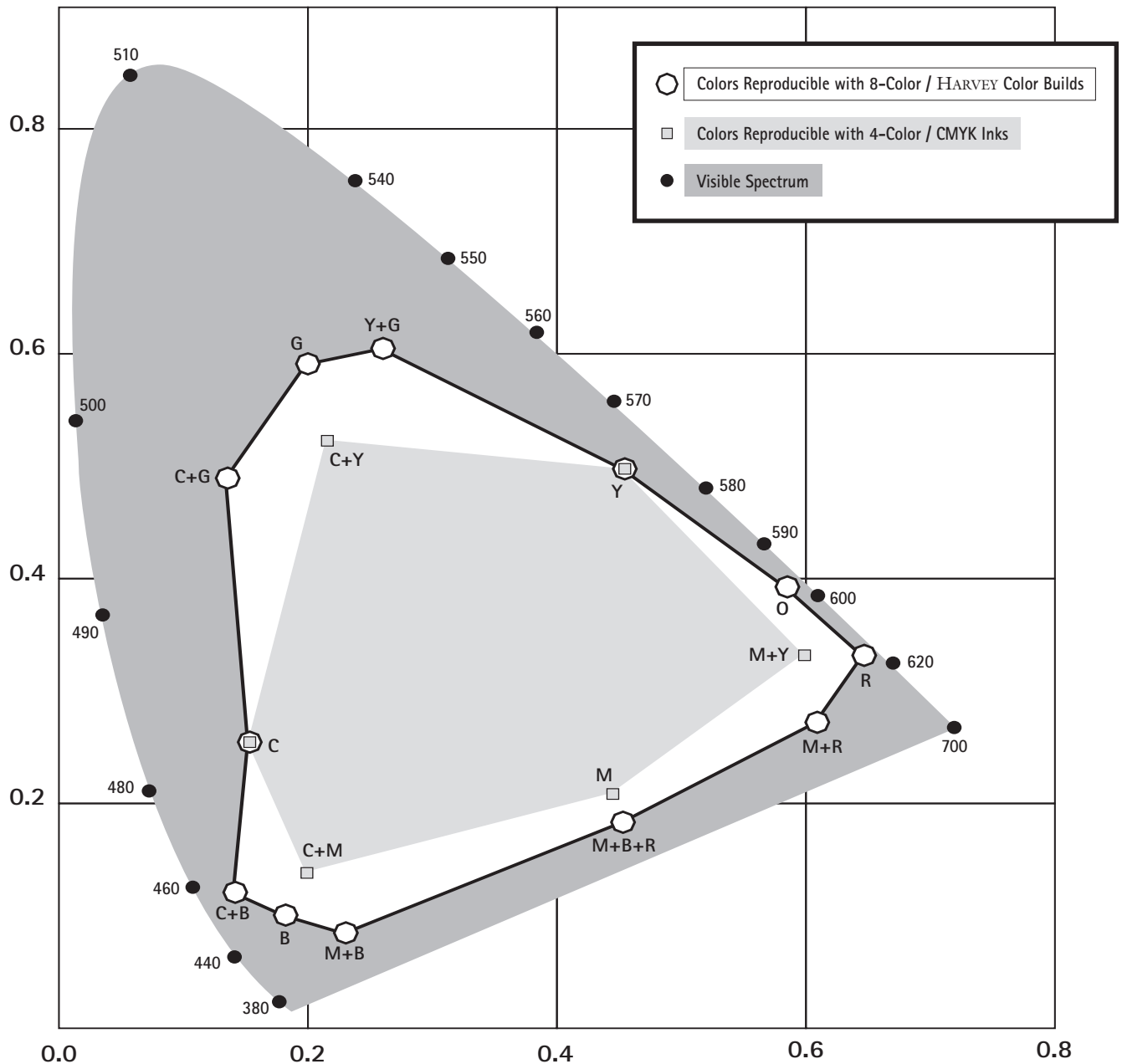
The CIE Chromaticity Diagram below is a universally accepted model of colors visible to the human eye. X, y, and z values in the original three-dimensional "color bag" are each expressed in terms of the other two, so they can be mathematically crunched into this flat representation.

Pure spectral colors, from a 380 nano-meter violet to a 700 nano-meter red, are wrapped in a horseshoe shape around a straight bottom line of non-spectral magentas and purples called the purple boundary. Colors at the perimeter are pure saturated colors. White occupies a more or less central dot.

The irregular hexagram in the center of the horseshoe represents

colors that theoretically may be created with combinations of cyan, magenta and yellow. These are the three subtractive primaries used, along with black, in conventional process printing.

The irregular polygon surrounding that shape represents the expanded gamut of colors available with HARVEY's four additional color drivers—a color space 40% larger than that of conventional processes.



Practical Applications for HARVEY.

Here's a checklist to help get you started on your first HARVEY project.

Ask yourself if you have clients or projects that fit these common categories—or would like to.

HARVEY offers unique graphic solutions to the design problems presented by each.

Check all that apply.

- Add visual interest to graphic-starved projects
- Agricultural paints
- Any publication cover
- Architectural products: glass, tile, carpeting, laminate, wall covering
- Art products: crayon, oil paints, pastels
- Art reproductions
- Automotive
- Balloons
- Blister cards
- Boats
- Book covers
- Cell phone jackets
- Children's products
- Children's publications
- Color printers
- Conventional illustration
- Corporate identities with "unprintable" PMS colors
- Cosmetics
- Crowded-market products
- Dyed leather goods
- Dyes
- Fashion
- Film, camera and photoprinting
- Floral products
- Food
- Gelled photography
- Great photo sources
- Illustrator files
- Industrial coatings
- Jet skis
- Laundry & cleaning products
- Needle work and other home craft products
- New business presentations
- No graphics budget
- Packaging
- Paint swatches
- Pastel background colors to add graphic interest to copy-heavy publications
- POP
- Posters
- Presenting data in visually interesting ways: bar charts, pie charts
- Ribbons
- Ski wear
- Snowboards
- Swim wear
- Terrible photo sources
- Vapor art
- Visual arts

HARVEY is a proprietary color matching system developed and trademarked by Hoechstetter Printing.

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