For its members, the National Geographic Society has built and enhanced a reputation for quality for 120 years. This expectation of perfection is uniquely fulfilled in the December 2009 issue of National Geographic magazine, which utilizes many of gravure’s capabilities to both excel and to blend with web offset.

The gravure portion of the issue spanning pages 29-148 is printed on a 50-lb. coated #4 dual-purpose sheet, developed specifically to minimize noticeable differences between the processes.

The story “Worlds Apart” on pages 78-93 uses gatefolds to illustrate the span of the galaxy, achieved by printing two signatures, each with a gate (one high-folio, the other low-folio), and binding them next to each other. Printing the signatures and marrying them up in the bindery with exact crossovers for the multiple-panel effect is a major achievement.

Another achievement involved “The Hazda” story on pages 94-119, which included seven close-up portraits and required exact flesh tone reproduction from the gravure process.

Client, Designer, Separator: National Geographic Society, Washington, DC
Engraver, Printer: Quad/Graphics, Inc., Martinsburg, WV
Press: Cerutti
Substrate: Verso Paper, Jay, ME
Ink: CR/T, Hartford, WI

Ron Williamson of National Geographic Society and Lisa Arias of Quad/Graphics accept Best of the Best award.

Copyright 2010 Harry Butler, for photos of the Golden Cylinder entries, and Copyright 2010 Greg Bashara/HBP for awards photos.
**Packaging | Flexible Packaging, Film**

**Item: Packaging for Coffee “Montego”**  
Submitted by: Ukrplastic

Key to this entry are the high-tech approaches applied at the prepress stage to show core features of the packed product and its filling, from processing of the photo images to manufacturing of the printed forms.

For cylinder making, Ukrplastic technicians utilized stochastic screening, a practice that is quite unique in the European market for rotogravure-printed packaging. Precise ink register in printing, made possible by the efforts of the prepress engineer, delivers intensity and contrast to the image, fulfilling the expectation of the designer. In sum, the high-quality printed package reflects the appearance of the packed product, thereby appealing to the widest buyer age profile.

Printer: Ukrplastic, Kyiv, Ukraine

Ukrplastic’s Alexandr M. Kozik (left), chief expert in printing and prepress, and Andriy Gora-Gorovskyy, cylinder production manager, accept award.

**Packaging | Labels/Wrappers, Film**

**Item: Leinenkugel’s Oktoberfest**  
Submitted by: Multi-Color Corporation

Leinenkugel’s has once again created a picture-perfect scene for its consumers: a beautiful autumn scene with a variety of reds, yellows, and oranges complement its seasonal Oktoberfest beer.

Slight vignettes along the edge of the label help create a feeling of the arriving season, and tight registration, particularly in the leaves, tent, and hat details, brings this scene to life. The combination of great graphics and superior printing won the prize.

Printer: Multi-Color Corporation, Batavia, OH
**Packaging | Labels/Wrappers, Film**

**Item: got2b Smooth Operator Lotion**  
**Submitted by: Multi-Color Corporation**

Cosmetics producer Henkel AG & Co. and the Schwarzkopf brand, which favor gravure because of its high-quality results on consumer products labels, had high requirements for color matching and for maintaining the light reproductions and tight registration on press. The combination of solids and vignettes required the most versatility of printing processes, says Multi-Color Corporation.

The true achievement and success of this packaging product, the printer notes, is in keeping the central element solid and vibrant in appearance while capturing the same color tones in a soft and subtle manner in the background.

Printer: Multi-Color Corporation, Batavia, OH

**Packaging | Labels/Wrappers, Paperboard**

**Item: Marlboro 100's Blend #54**  
**Submitted by: Trident Americas, Charlotte, NC**

In gravure printing of vignettes, a common phenomenon is the linking of cells that occurs where ink stops flooding over the cell walls and creates a hard line. But in this project, by varying the cell depth instead of the width, the conventional cell shape produced using Direct Laser Engraving leads to a near continuous-tone reproduction of the dark green, resulting in a smooth vignette that shows no linking and thus no hard lines.

Combined with electronically engraved linework cylinders, this printed sample exceeded the customer’s expectations for this new product launch.

Client: Phillip Morris USA  
Designer: Leo Burnett Company, Inc.  
Separator: Trident Americas, Chester, VA  
Engraver: Trident Americas, Charlotte, NC  
Printer: Shorewood Packaging, Newport News, VA  
Press: Rotomec, Bobst Group  
Substrate: MeadWestvaco, Covington, VA  
Ink: Sun Chemical, Colonial Heights, VA

Kenn Akers of Trident Americas, Chester, VA, accepts award.
The top-quality color-registration demands of this packaging project over its enormous size represented a huge challenge—and ultimately a tremendous quality and technical achievement—for gravure printing. The job required application of four fine-screen process colors and a special orange, plus a water-based coating.

As the finished packaging size exceeded the limits of both the printer’s maximum cylinder circumference of 82″ and maximum web width of 55″, technicians had to separate the project into two pieces, two panels per piece, by using 58″-circumference cylinders. In prepress, the continuous-tone image files were fairly large, with minimal printer and detail enhancement applied to the background and image areas, while UCR was applied to shadow areas. The project required the engraving of 11 cylinders, each requiring from five to nine hours.

The result: impeccable detail and color balance on multiple sheets comprising a large-format packaging project.

Customer, Designer: VIZIO, Inc.
Separator, Engraver, Printer: Packaging Corporation of America, Waco, TX
Substrate: MeadWestvaco
Ink: Sun Chemical

The challenge of this entry is the balance between the model’s flesh tones and hair. Because the end-user views the image with a highly critical eye, the print quality was a significant key during the production. There was an emphasis on the highlights in the hair to emphasize the usage of the product, hence the necessary use of rotogravure-printed labels.

Separator, Printer: SleeveCo., Inc., Dawsonville, GA
Engraver: Alliance Graphics, Alpharetta, GA
Press: W.R. Chestnut Engineering, Fairfield, NJ
Substrate: Bonset, Brown Summit, NC
Ink: Sun Inks, Atlanta, GA
Item: City Square  
Submitted by: Armstrong World Industries

Through a unique combination of technical, print, and manufacturing achievements, the high-end City Square vinyl design appears as real as any stone or concrete blocks in a metropolitan setting. The combination of colors and high-end engraving provides detail in both depth and texture, making the design appealing to consumers as well as pleasant for any home.

Astonishingly, City Square was manufactured with five spot colors on a 144″-wide press.

Designer: Linda Abrams, Armstrong  
Separator: Mark Zeamer, Armstrong  
Engraver: Standex Engraving  
Printer: Armstrong World Industries, Lancaster, PA  
Press: KochsieK KOM261  
Substrate: Armstrong  
Ink: Penn Color

Rod Sosa, technical design manager of Armstrong World Industries, accepts the Golden Cylinder Award in the Product—Floor Coverings category.

Item: Edgar Allan Poe/Gary Cooper Stamps  
Submitted by: Avery Dennison, Specialty Printing Division

These two postage stamps are both printed in 300- to 400-line screens in panes of 20, yet they clearly depict the marked evolution in portrait photography from the 18th century to the 19th century. Reproducing the flesh tones in Poe’s face and controlling overall color were significant challenges, yet Avery Dennison’s continually upgraded press still holds register tolerances below .006″. Superior register of the poet’s eyes and color consistency of the outer border area, requiring fine viscosity control, earned the printer praise from the art director and the U.S. Postal Service.

For the Gary Cooper stamp issue, the detailing in the facial tones and the color/register control of Cooper’s blue eyes made the stamp a hit with the art director and Postal Service. The stamp, featuring the actor’s name in small reverse type and the USA 44, made precise register a must.

Client: United States Postal Service  
Separator, Engraver: Trident Americas, Richmond, VA  
Printer: Avery Dennison, SPD, Clinton, SC  
Press: DaiNippon Kiko  
Substrate: Fasson Roll Division  
Ink: Siegwerk, Inman, SC
**Product** | **Party Products**

**Item:** iCarly Kids Plates  
Submitted by: American Greetings

The assignment: to accurately reproduce a licensed color design for kids serveware products, which originally had been gravure-printed on 1.25-gauge polystyrene film using solvent-based inks. The challenge: with relocation of the press and its conversion to water-based inks, American Greetings engineers had to develop an ink system that would print on film with acceptable adhesion and transparency and, as the product is thermal-formed, withstand laminating temperatures exceeding 400 degrees F.

The outcome: colors matched original specifications featuring web star Carly Shay, and the product withstood high-temperature adhesion.

Printer: American Greetings, Greeneville, TN  
Engraver: Image Print Technologies, Wilmington, NC  
Press: Hy Roto  
Ink: American Ink Technology, Pine Bluff, AR

**Product** | **Other, Gravure**

**Item:** CGT Tower Collection, 2010  
Submitted by: Canadian General-Tower Limited

For its new line of premium vinyl liners for above-ground and inground swimming pools, printed on a variety of substrate colors and gauges, CGT maximized the versatility of four-color gravure to achieve both print quality and the market appeal of new, realistic, and creative printed surface designs. The company also created custom exclusive variants of specific designs.

Despite heightened demand for new tile designs each year, CGT designers must be mindful that the designs match with one or more of CGT’s existing floor prints, and that the four spot colors incorporate the inks used in the floor artwork into the tile artwork, which requires critical color matching. A final challenge: achieving the realistic textures of each design requires tones as low as 10% in some areas.

Printer: Canadian General-Tower Limited, Cambridge, ON
Printed by gravure 52 issues a year and distributed in more than 400 newspapers, PARADE is the largest weekly magazine by circulation in the U.S.

The October 26, 2010 issue, which features specialized flexographic imprinting on the cover and a unique “Dutch” door in the center, exhibits the versatility of publication gravure: weekly multimillion-copy runs, quality color reproduction throughout the run, and production innovations that appeal to readers and advertisers.

Once the publication completes all prepress production, it transmits data to Worldcolor via the printer’s data network for distribution to multiple print locations. In cylinder engraving, Worldcolor applies ICC color profiles to match paper and ink color reproduction to the customer’s in-house proofing systems.

Client: PARADE Publications, New York City
Printer: Worldcolor Mt. Morris, Mt. Morris, IL
Press: Motter
Substrate: Alberta
Ink: GPI Sun Chemical

The U.S.’s second-largest weekly magazine by circulation is an example of the rich color and smooth gradation of tones that only gravure printing can achieve. It also makes use of on-press flexographic imprinting for eye-catching editorial content, as well as two advertising “Dutch” door features within the product.

Publication staffs handle layout, design, and prepress production, then transmit electronic data via Worldcolor’s network to the printer’s multiple plant locations. In cylinder engraving, Worldcolor applies ICC color profiles to match paper and ink color reproduction to the customer’s in-house proofing systems.

Client: USA TODAY/USA WEEKEND Magazine, McLean, VA
Printer: Worldcolor Mt. Morris, Mt. Morris, IL
Press: Motter
Substrate: Alberta
Ink: GPI Sun Chemical
Publication | Supercalendered, Retail

Item: Target circular, December 20, 2009 Issue
Submitted by: RR Donnelley Lancaster

Achieve a “coated look” on a “super-cal” sheet? This was the challenge laid down by the Target organization. Naysayers say it’s impossible to make printing on super-cal paper look like a lightweight coated sheet. This circular scores with a delicate balance of putting just the right amount of ink on the sheet without putting on too much, which would plug the image and eliminate all shape and detail. It also uses exceptional gray balance by which an array of featured products are displayed in their best light while realistic flesh tones are maintained. The result—which looks both smooth and glossy—is a coated look on super-cal paper, achievable only by a strong customer/printer commitment and the gravure process.

Engraver, Printer: RR Donnelley, Lancaster, PA
Press: Cerutti
Substrate: Madison Paper
Ink: Flint Ink

Publication | Supercalendered, Catalog

Item: Sears Canada Christmas Wishbook 2008
Submitted by: Worldcolor Mt. Morris

The 864 body pages of this catalog—most of which were printed on SC-A stock, with lightweight coated on select signatures adding punch to feature products—were framed by the diecut window of an Offset cover. The contents, printed in both English and French, showcased merchandise ranging from fashion and electronics to home products and tools. As it utilized five gravure presses and multiple paper stocks, Worldcolor called on its ICC conversion in the production flow to match SWOP #5 PDF files to the substrates for optimum print quality.

The printer matched and monitored color using its award-winning Quality database, tracked press-side measurements, maintained standards, and analyzed L*a*b gray patches to optimize the gravure process.

Client: Sears Canada, Toronto, CA
Printer: Worldcolor Mt. Morris, Mt. Morris, IL
Presses: Motter, KBA
Substrates: IP Verso, Myllykoski
Ink: GPI Sun Chemical

Al Westbrook of RR Donnelley-Lancaster poses with Golden Cylinder Award in the Publication—Supercalendered Retail category.

David Miller of Worldcolor Mt. Morris and Enza Marella of Sears Canada accept award.
Submitted by: RR Donnelley New York

Bold use of rich and vibrant colors, excellent separation, fine contrast and detail, and photographic-quality reproductions printed page after page—all of this, Donnelley notes, appearing on nearly two million copies on lightweight supercalendered paper, remarkably produced as five print forms across three presses.

In ads for high-end fashion and accessories that fill the first half of the magazine, says Donnelley, luxury advertisers sought and obtained smooth reproduction, shape, detail, vibrant color, and consistent quality via the gravure process.

In the “Dream States” section of the magazine, gravure quality specially showcases a wet eyelid, a glistening black snake, a goldfish, eye shadows, and a colorful feather.

Customer, Designer: The New York Times
Separator, Engraver, Printer: RR Donnelley, Lancaster, PA
Presses: Cerutti, KBA
Substrate: UPM
Ink: Flint Ink

Publication | Supercalendered, Magazine

Item: Saturday Bonus Sale
Submitted by: JCPenney Media L.P., Plano, TX

Production of this job was called a “printer’s challenge” as it required tight tolerances to achieve high-quality reproduction of both rich background standards and flesh tones, which had to be balanced across a 60″-wide web in order to print smoothly. Client and printer specialists averted background compromises by addressing issues before files were completed in the premedia department. All partners worked together to achieve a successful result, says one participant, so as to not have to compromise the printed product on press.
Item: White Flower Farm, The Garden Book, Spring 2010
Submitted by: Meredith Print Advantage, Des Moines, IA

The 60th anniversary edition of this catalog features the rich depth of color, subtle highlights, shape, detail, and contrast that are all achievable today on lightweight stock by the gravure process. Meredith worked with the Quad/Graphics preliminary department to adjust gradations and finalize corrections to avert on-cylinder adjustments, and with Quad/Graphics specialists to maximize solvent recovery.

Too, use of automated blending systems for batching inks and color bars for quick analysis and color adjustment allowed this job to be approved for color in a very short period of time.

Separator: Group 360
Engraver: Quad/Graphics, Martinsburg, WV
Printer: Quad/Graphics
Press: Cerutti
Substrate: NewPage Corporation
Ink: Quad/Graphics CR/T

Item: L.L. Bean, October Women’s Catalog
Submitted by: Quad/Graphics, Inc., Sussex, WI

The most notable feature of L.L. Bean’s October Women’s Catalog was an actual fabric dot swatch (sometimes called a “fabric dot whack”) placed on page 3 of the gravure signature and intended to show through a round die-cut on the cover of the catalog.

Applying the swatch required extensive testing of the adhesive, correct and consistent placement of the swatch, ensuring that the paper under the swatch would lie flat to avert bindery jams and a poor product appearance, and of course color-matching the swatch to the printed image.

Successful production of the catalog demonstrated use of the gravure process with the application of a special fabric swatch.

Client and Designer: L.L. Bean, Inc., Freeport, ME
Separator: Quad/Graphics, Inc., Freeport, ME
Engraver, Printer: Quad/Graphics, Martinsburg, WV
Press: Cerutti
Substrate: NewPage Corporation
Ink: CR/T (Quad/Graphics)

Accepting the award for Quad/Graphics are Dan Dunn (Alexandria, VA) and Lisa Arias (Martinsburg, WV).
Publication | Lightweight Coated (under 40#), Magazine

Item: Better Homes and Gardens, October 2009
Submitted by: RR Donnelley, Mattoon, IL

This premier home and family publication helps people turn home, cooking, and gardening inspiration into action. The magazine focuses on decorating, building and remodeling, crafts, cooking, and gardening while providing extensive information for women and families.

The color range in this 276-page issue—extending from very subtle flesh tones in light and airy editorials to dense ink coverage found in some of the food and garden stories—lends itself perfectly to gravure. Unique challenges are everywhere, from two- and four-color editorial type to complex crossovers to color balance throughout the press run.

Measurement of ink viscosity, temperature, and density are crucial to print success on 38-lb. coated paper, as are fold and line-up, coupled with a demanding production schedule.

Client: Meredith Corporation, Des Moines, IA
Designer: Michael Belknap, Des Moines, IA
Separator: Meredith Imaging Center, Des Moines, IA
Engraver, Printer: RR Donnelley, Mattoon, IL
Presses: Cerutti, Motter
Substrate: UPM, Neoga, IL
Ink: Flint Ink, Warsaw, IN

Publication | Coated (over 40#), Retail

Item: Sears Canada Fall Flyer
Submitted by: Worldcolor Mt. Morris

This Sears Canada publication, produced in English and French, is called an outstanding example of gravure print quality on 60-lb. coated paper printed to SWOP #3 standards and delivered as a stitched, press-finished product.

Gravure, the client’s process of choice for its subtle but saturated tone transition, presents women’s and men’s fall fashions with detailed photographic clarity unique to the process. SWOP PDF files matched to the gravure process through ICC profiles produce the impact and predictable high quality that Sears Canada requires.

Worldcolor monitors color through its award-winning Quality database, tracks press-side measurements, maintains standards, and analyzes L*a*b* gray patches for mid-tone optimization of the gravure process.

Client: Sears Canada, Toronto, CA
Printer: Worldcolor Mt. Morris, Mt. Morris, IL
Press: Motter
Substrate: IP Verso (Influence 60#)
Ink: GPI Sun Chemical

Sears Canada’s Enza Marella and Worldcolor’s David Miller accept award.
Victoria’s Secret: The Little Book of Lingerie
Submitted by: RR Donnelley, Lynchburg, PA

This catalog was particularly challenging in that it combined very high quality expectations while maintaining an extremely aggressive production schedule. Through its proprietary color management system, Donnelley was able to achieve gray balance control and provide “top notch” quality very quickly. Flesh tone smoothness is given top priority, as are swatch-matched products throughout. Lightweight coated paper can present printability challenges, as well as show-through concerns. Small reverse type on dark backgrounds requires tight register control and constant monitoring. Experienced craftsmanship and constant focus are musts to meet the customer’s high quality expectations and tight schedule requirements.
UPM Paper Sommelier
Submitted by: UPM, Helsinki, Finland

UPM developed its Paper Sommelier to make paper selection easier for people who are not familiar with paper properties that are typically expressed in numbers. Paper Sommelier describes five general characteristics of paper, then offers four easy-to-understand alternatives (words or feelings) within each category. The five general characteristics include: color experience, sharpness and feel, body and posture, print gloss, and print through.

Based on the choices provided, the prospective paper specifier, who usually would use the tool when accompanied by a UPM paper specialist, is given three best-matching choices from UPM’s product array.

Packaging for chocolate Pergale
Submitted by: Ukrplastic

This entry shows how a mixture of innovative prepress approaches, including stochastic screening and cylinder imaging via indirect laser exposure, can uniquely enhance the gravure process so as to achieve exclusive product packaging that projects quality and is eye-catching.

Moreover, selective matte-lacquer dot coating combined with a matte-achieved logotype results in packaging that is clearly of VIP caliber, particularly on a supermarket shelf.

Designer, Engraver, Printer: Ukrplastic, Kyiv, Ukraine

Technical Innovation | Inks & Substrates

UPM’s Erik Ohls, visiting from Helsinki, accepts award.

Ukrplastic’s Alexandr M. Kozik (left) and Andriy Gorovskyy accept award.
Technical Innovation | Press

New Developments in Rotogravure Presses for Publication Printing
Submitted by: Officine Meccaniche Giovanni Cerutti

For installation on its new rotogravure publication presses, the Cerutti organization has developed a variable cutter, dedicated to low-pagination products, in response to market needs for flexibility and productivity. Already, two new Cerutti variable cutters have been installed in Europe, the latest at Eurohueco, Barcelona, Spain, which started up in September 2009.

The second, brand-new technical development consists of improvements, designed by the company’s Technical Department, which involve (a) belt removal from the reelstand, and (b) introduction of an electronic lineshaft.

Massimo Genio, representing North American Cerutti, New Berlin, WI, accepts award.

Technical Innovation | Packaging

Oreo Halloween Edition
Submitted by: Sonoco Flexible Packaging, Charlotte, NC

In developing packaging for a seasonal consumer item, Sonoco started with vibrant graphics to enhance shelf appeal, then devised special inline-applied, patterned permanent and resealable adhesives that combine to provide “easy open” access to the product tray.

The two-ply laminate, applied using deep-cell engraving produced on the direct laser systems at Trident Americas, is precision diecut to create an opening on the top and bottom surfaces. By not applying adhesive to the thumb-pull area, the tab is used to open the resealable layer, which exposes the contents of the package. The opening can be reclosed to preserve product freshness.

The package is described as very classy, and is made possible only by the gravure process.

Developer: Sonoco Flexible Packaging, Charlotte, NC
Separator: Southern Graphic Systems, Florence, KY
Engraver: Trident Americas, Charlotte, NC
Printer: Sonoco Flexible Packaging, Edinburgh, IN
Press: Cerutti
Substrate: SKC, Inc., Covington, KY
Ink: Flint Ink
The Gravure Association of America congratulates winners in its 2010 Golden Cylinder Awards competition:

**Best of the Best:**
- Quad/Graphics, Sussex, WI

**Packaging Category**
- Multi-Color Corporation, Batavia, OH
- Packaging Corporation of America, Waco, TX
- SleeveCo, Inc., Dawsonville, GA
- Trident Americas, Charlotte, NC
- Ukrlastic, Kyiv, Ukraine

**Product Category**
- American Greetings, Greeneville, TN
- Armstrong World Industries, Lancaster, PA
- Avery Dennison, SPD, Clinton, SC
- Canadian General-Tower Limited, Cambridge, ON

**Publication Category**
- RR Donnelley, Lancaster, PA
- RR Donnelley, Lynchburg, PA
- RR Donnelley, Mattoon, IL
- RR Donnelley, New York, NY
- Meredith Print Advantage, Des Moines, IA
- JCPenney Media L.P., Plano, TX
- Quad/Graphics, Sussex, WI

**Technical Innovation Category**
- Officine Meccaniche Giovanni Ceruti
- Sonoco Flexible Packaging, Charlotte, NC
- UPM, Helsinki, Finland
- Worldcolor, Mt. Morris, IL