Flatbed Printing Ideas GUIDE
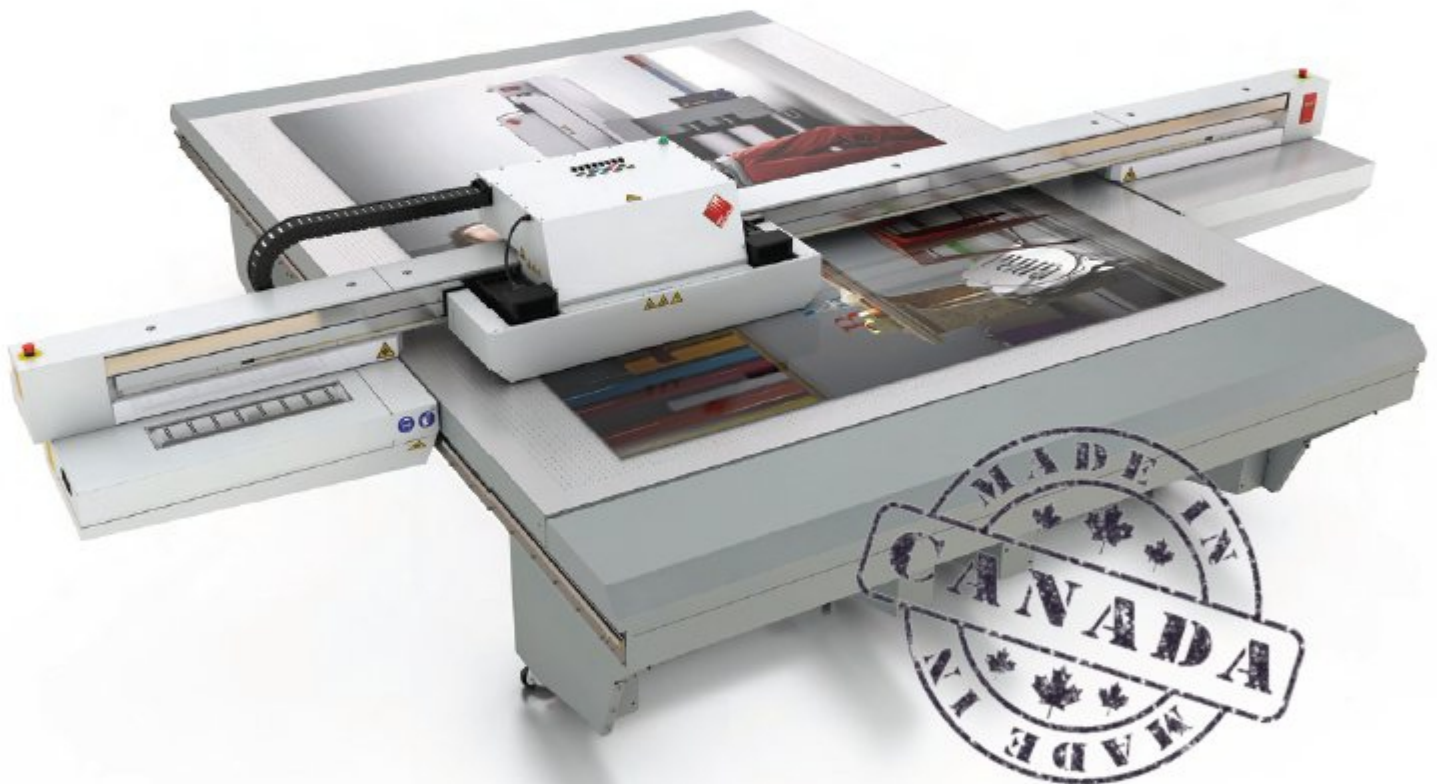
dominion blue REPROGRAPHICS

PUT IT
all on the
TABLE

Dominion Blue Flatbed Printing

WITH THE RIGHT PRINTER ANYTHING IS POSSIBLE

Océ Arizona® Series printers are recognized as the best in the market for several reasons: exceptional print quality and value, plus the ability to help customers truly innovate their business. From point-of-sale displays to templates for airplane parts, the only limit here is your imagination.

MADE IN CANADA

Retail and Point-of-Purchase Displays

Point-of-purchase displays (POP or also point-of-sale, POS) help consumers make a buying decision right in the store. The most effective POP displays have excellent image quality, visual impact through size, and strong, vivid colours all while remaining cost-effective.

The Océ Arizona® series UV-curable printers are ideal for printing directly onto popular POP substrates such as Fome-Cor® and Gatorplast®, eliminating the need for mounting, laminating and trimming while producing unrivalled detail and sharpness.

1. Promotions Posters

Short-term signage is used for everything from store sale posters to event posters to workplace signage. These applications are intended to be replaced often as sales offers or events change. The Océ ColorWave® 650 gives you a highly productive and cost effective way to create posters and short-term display signage. Due to the Océ CrystalPoint® Technology, this printer produces hundreds of posters with very little user interaction. All prints can be cut to size and stacked automatically, and because they are instantly dry, they are immediately usable and saleable.

2. Window Displays

Print on Re-Board substrate and cut on an Océ ProCut™ digital cutting system.

3. Floor Graphics

Floor graphics are a great tool in well-trafficked commercial areas for either promotional or directional purposes. Typically floor graphics are applied with pressure sensitive adhesive and over-laminated with a non-slip clear laminate. The Roll Media Option on an Océ Arizona flatbed printer can easily produce floor graphics.

4. In-Store Storage and Displays

Printing on composite board is an upcoming type of media used in the POP display market, interior shop decoration and the exhibition industries. This media is environmentally friendly, has a relatively low weight and is very strong due to the honeycomb construction.

5. Decorative Wood Signage

Print directly onto wood using UV inks to produce visually stunning signs for businesses or even home décor. For best quality use the White Ink Option on an Océ Arizona in Express Mode.

6. Backlit Displays

With the Océ Arizona series large format flatbed printers you can create vibrant digital backlit display panels by overprinting the image directly onto rigid acrylic at sizes exceeding 4x8 or 8x10 feet.

7. Banners

For flexibility between rigid and roll-to-roll types of applications, the Océ Arizona flatbed UV printer series are banner capable printers whose roll-to-roll option allows UV printing on roll based media up to 87 inches wide.

Technology evolves so quickly these days. How long will it take to outgrow my UV Flatbed printer?

Canon PPSG has always strived to make it as easy as possible for our customers to grow their business. That is the reason why many Océ Arizona UV flatbed printers are designed to be upgradeable when our customers' businesses grow and require more options. For instance, with a simple upgrade kit, the Océ Arizona 440 GT can convert from a 4 ink channel printer to a 6 or 8 ink channel configuration to help speed up production or help enter into the white ink market. This eliminates the need to buy a completely new machine.

8. Indoor Signage

This Arizona series of printers are excellent for standard signage applications such as POP graphics and versatile enough to enable users to produce high-margin, advanced signage.

9. Directional Metro Maps

Print on brushed aluminum using the White Ink Option.

Outdoor
Applications

The elements are unpredictable and graphics specifically designed for the outdoors need to be durable and fade resistant. All Océ Arizona® large format printers with UV-curable ink offer outdoor durability of up to two years and will help keep your digital backlit displays, outdoor signs, banners and other outdoor displays looking great today, tomorrow and next year.

1. Backlit Displays

For outdoor-durable, fade-resistant digital backlit displays, Océ Arizona large format flatbed printers allow you to reverse print directly onto clear acrylic with UV-curable inks. The Océ Arizona series offers an unparalleled digital backlit printer solution because it utilizes a layering mode, which allows users to print another image directly on top of the previous one with precise registration, thereby doubling the image density to produce backlit displays that rival photographic output. Additionally, 3-layer printing can add a white diffusion layer between the colour layers resulting in high-margin "day/night" backlits that look good whether the lights are off or on.

2. Magnetic Car Door Sign

Instantly, easily and temporarily update any ride without the hassle of installing vinyl wraps or the annoying residue of some adhesives. Print directly onto durable magnets and cut into and shape using the Océ ProCut™.

3. Building Wraps

Big graphics are in keeping with big events; sporting events, grand openings and celebrations. Scrim banner materials, vinyls, and cling vinyl media coupled with the outdoor-durable inks of the Océ Arizona UV flatbed printers can turn any building into your canvas.

4. Temporary Construction Fencing/Hoardings

The wall pictured here is 2.4km (1.5 miles) long and was printed on Skybond (composite aluminum) panels. For a more direct approach, print construction site hoardings directly onto rigid sheets with the Océ Arizona series of printers and eliminate the extra finishing steps.

5. Outdoor signage

Outdoor sign printing can be challenging because it needs to withstand the elements but also attract attention. Océ roll-based and flatbed printers use outdoor durable, UV-curable inks and advanced Océ VariaDot® imaging technology to produce durable, eye-catching signage on a wide variety of media that stands out and lasts.
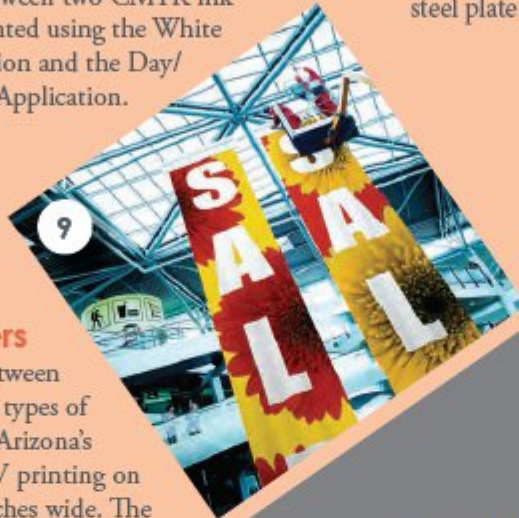

Signs by Beach
949-752-8200

6. Zoo Signage
Printed on DIBOND and appreciated by humans and animals alike.

7. Building Signage
Reflective during the day; backlit at night. Print as a three-layer job: a white ink layer between two CMYK ink layers. Printed using the White Ink Option and the Day/Night Application.

8. Flags
Textile material is stretched on a wood panel and held flat using magnets on a steel plate below the wood panel.

9. Banners
For flexibility between rigid and roll-to-roll types of applications, the Océ Arizona's roll-to-roll option allows UV printing on roll based media up to 87 inches wide. The Océ Arizona Series offers durable banner printing solutions that can last up to two years outdoors.

Does everyone need the roll media option?

Not necessarily. It all depends on the applications your company sells. The Roll Media Option extends the range of media and markets you could sell to. This could be installed later on when your company wants to venture into new markets. It can print on most types of flexible media including banner vinyl, self-adhesive vinyl, mesh, textiles, poster paper, blue-backed paper and backlit films. Add in that you can print white with certain Océ Arizona printers and the possibilities are endless.

10. Window Graphics
Window graphics can be used for decoration, privacy and even security. They are an easy and quick way to reinvent the look of any space. Printed on vinyl and precisely cut on the Océ ProCut.
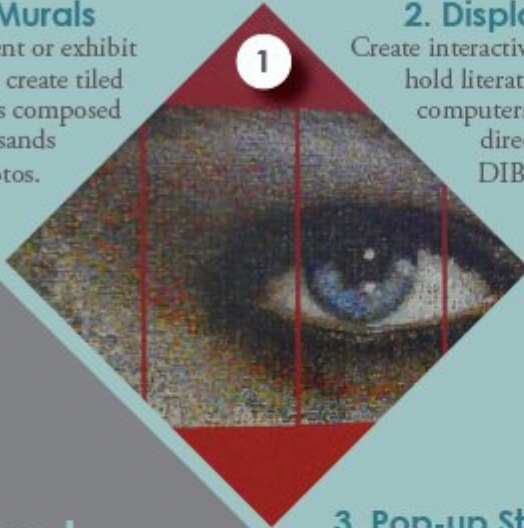
11. Bus Bench
Print on laminate-covered wood.

Exhibits and
Event Graphics

Quality and creativity are essential in the world of stage and exhibit graphics. Whether it's pop-up displays, banners, digital backlit displays, backdrops, or props one flatbed printer can produce them all.

1. Wall Murals

To give any event or exhibit visual impact, create tiled mosaic murals composed of thousands of photos.

2. Display Stands

Create interactive display stands to hold literature, tablets or computers by printing directly on DIBOND.

3. Pop-up Stands in a Box

The pop-up stand, base and shipping/carry-case were all printed directly on Re-Board substrate and then a vinyl finishing strip was added to the stand base.

4. Acrylic Displays

Use the ProCut™ digital cutter to score and cut acrylic panels to fit into metal frames that are side-lit with LEDs.

How can I achieve better quality prints?

VariaDot® Technology delivers finer details and smoother gradients in highlight areas, as well as crisp colours in the mid tones, plus incredible density in shadows and areas of solid colour. Images look far superior to those printed on a conventional, fixed-droplet, 6-colour inkjet printer. Type as small as 2 pt. - even white type on a dark background - is perfectly legible.

VariaDot technology can achieve high image quality due to:

• The ability to vary the drop size to as little as 6 picoliters which produces sharp images with smoother gradients and quarter-tones.

• The ability to jet larger droplets up to 42 picoliters produces dense, uniform solids. The result is near-photographic image quality with sharpness only before seen at resolutions of 1,440 dpi or higher.

Océ VariaDot imaging technology with four colour inks uses up to 50 per cent less ink compared to six colour printers with fixed-droplet inkjet technology by placing a varying amount of ink at every location. This also helps produce quality prints without excessive ink consumption.
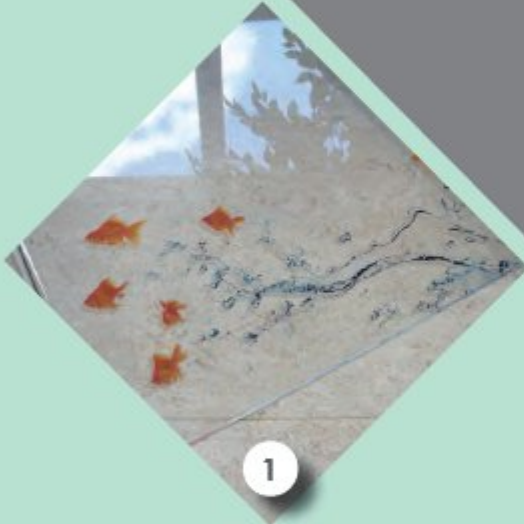
Manufactured
Products

Expand the potential of your business by producing manufactured products that can be sold "as is" or customized based on your client's needs. Ensure you are getting the most out of your printer by experimenting with some of the below products.

1. Plexiglas Tables
Create custom tables by using the White Ink Option to second-surface print on Plexiglas then thermoform to create legs.

2. Bowls
Print designs directly on to acrylic and then thermoform after cutting.

3. Skateboard
Print directly onto both sides of plywood, cut then add wheels. It's just that easy!

4. Click Floor Laminate
Print directly on pre-cut panels. Ink is then protected with a varnish topcoat.

5. Polystyrene Furniture
Print directly onto Polystyrene and cut on an Océ ProCut ™digital cutting system.

6. Re-board Furniture
Produce fun furniture quickly and easily by printing on Re-Board substrate and cutting on the Océ ProCut digital cutter.

7. Drink Coasters
Printed on acrylic and finished with lacquer spray for effect and protection.

8. Chalkboard
Create personalized chalkboards for scorekeeping, restaurants, sports teams and just about anything else you can think of by printing directly onto chalkboads using the White Ink Option.

9. Wooden Toys
These throw-back wooden toys were easily and quickly mass produced by using the White Ink Option to print directly onto wood and then cut on the Océ ProCut.

What's up with white ink?

White ink enables printing on non-white media or objects, backlit applications on transparent media and printing white as a spot colour. White ink printing offers printers the ability to sell high-value backlit graphics, and to create specialty applications on almost any media or object.

Printing on coloured, clear, rigid and flexible media means you can increase your portfolio offerings to include premium-priced backlit and specialty graphics that maximize your revenue potential.

When shopping for a white ink capable flatbed here are some questions to ask:

1. Is white ink available "on demand" without having to replace/supplant existing colour channels such as light cyan and/or light magenta?

2. If I have to switch over to print with white ink, how long will it take and how much ink/flush will I waste?

3. Am I able to print white at the same time as my other colours or is it a separate print pass?

4. Can I layer white and colours in any order and if so how many layers?

5. How opaque is one layer of white ink?

6. What is the quality of finish in the white ink? Is it really "white" or is it light grey or light yellow?
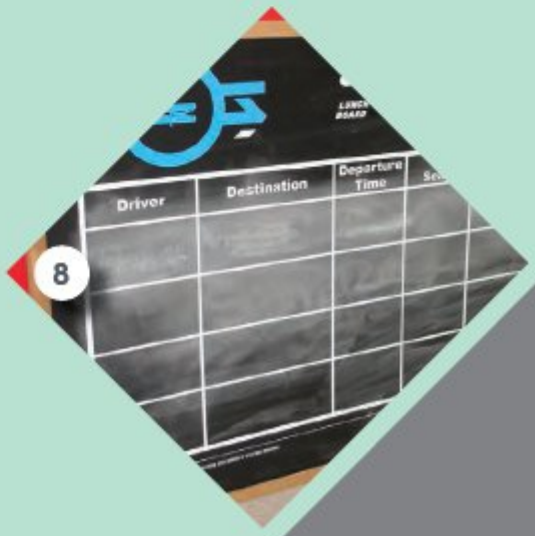
Promotional
Items

Give-aways or "swag" are promotional items that typically require customization. Using a mold these items can be easily and accurately produced and customized in large batches all in one flow on your flatbed printer. Benefits of using a flatbed for these applications include, the ability to do short runs, limitless graphical possibilities, and quick delivery term.

1. Apparel Decoration – Direct Print
Print custom flip-flops (sandals) directly onto foam then cut on the Océ ProCut™ digital cutter.

2. Cleaning Sponge
Print directly onto cleaning sponges.

3. Custom Labeled Pencils
Custom jig created to hold pencils on table as batches are printed.

4. Inflatables
Print directly on deflated inflatables in any shape.

5. Mobile Phone Covers
Custom jig created to hold phone covers in place while printing.

6. Candy Tins
Print directly onto pre-made candy tins using the White Ink Option.

7. Garment Iron-on Transfers
Print on transfer media then apply to garment using household iron appliance. Take advantage of the White Ink Option to create stunning graphics on darker materials.
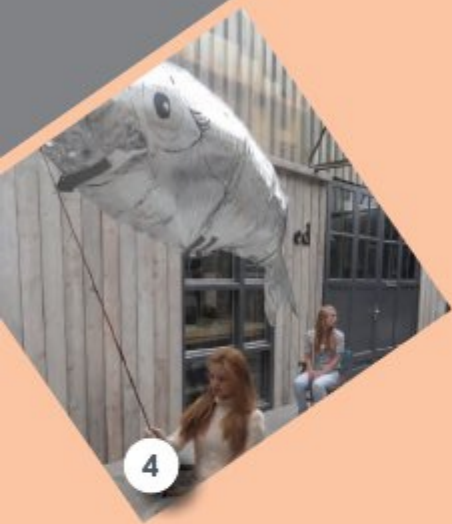
8. Plastic Carry Case
Cut and creased on an Océ ProCut digital cutting system.

Where do I get the media for these applications?

Media plays a significant role in getting great output. The Océ Display Graphics Systems (DGS) A-Team includes media specialists dedicated to testing and profiling media, ensuring optimal performance in Océ printers. We qualify all media we sell, and maintain an extensive database of downloadable profiles ensuring the perfect match for your Océ printer, media and application. Some media options chosen specifically for many of the applications featured here, are:

Flexible media
• White and Clear Vinyl • Bio-Vinyl • Scrim Vinyl • Backlit Film • Grey Back Film • Presentation Bond • PhotoPaper • Poster Paper • Textiles

Rigid media
• Hi-Core Corrugated • Fome-Cor® • GatorFoam • Duraplast • Styrene • PVC Sintra • Graphic.al

To find out more about the different media offered or to obtain pricing and samples, please contact our Imaging Supplies team at PPSGInfo@canada.canon.com or 1-800-668-1945.
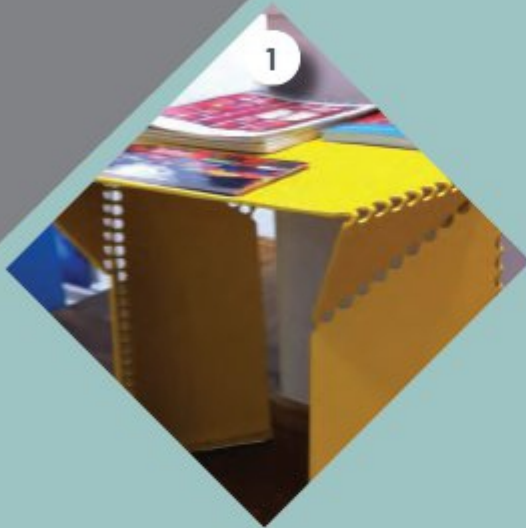
Finishing

The finishing stage is typically the most labour intensive and costly due to a manual cutting process. A streamlined print and cut workflow brings cutting into the modern age by utilizing a sophisticated, automated workflow start to finish. By incorporating display graphics cutting tables, an optical registration system and cutting software into your workflow, cutting is no longer a bottleneck. Even complex contour or kiss-cutting is a breeze.

1. Aluminum Table
Aluminum cut, bent, then ainted.

2. 3D Dinosaur
Cut foam-board material on an Océ ProCut™ digital cutting system.

3. Kirigami
Kirigami is the art of folding a sheet of paper and then cutting a pattern to reveal a silhouette. The pattern can be as simple as a flower or snowflake or as intricate as a building or landscape. The possibilities are endless.

4. Re-board Structural Shelving
Cut on an Océ ProCut digital cutting system.

How do the Océ Arizona® printer and the Océ ProCut cutter work together?

Basically, the ONYX® software speaks to both printer and cutter and creates a barcode when the artwork is printed so that when you want to cut it down, you scan the barcode at the cutter and there's a specific die-line to that artwork for the cutter to cut. You can arrange the die-lines however you want and arrange the artwork however you want. The cutter scans the media board and finds its axis and confirms with you before cutting.

Out of the Ordinary

Deliver top-quality applications as diverse as your customers' imaginations with the ability to directly print onto many different flexible or rigid materials such as doors, tabletops, window blinds, promotional items or even toilet seats. Since the images are printed directly onto the substrate, you can eliminate workflow steps, saving time and money.

1. Bicycle Fender
Print on aluminum roll stock using Roll Media Option and then encapsulate in plastic after trimming.

2. Self-framing Art
Create self-framing art by printing directly onto KappaTex substrate and then cutting and creasing using the Océ ProCut™. Or, use the generous 49 x 98 inch imaging area of an Océ Arizona®, to print directly on pre-stretched artist canvas on frames up to 2 inches thick. With excellent sharpness, colour accuracy and repeatability, artists and their licensees can make originals and reproductions that convey the true creativity and inspiration that are the hallmarks of fine art.

3. Acrylic Lamps
Apply primer to acrylic before printing and cutting.
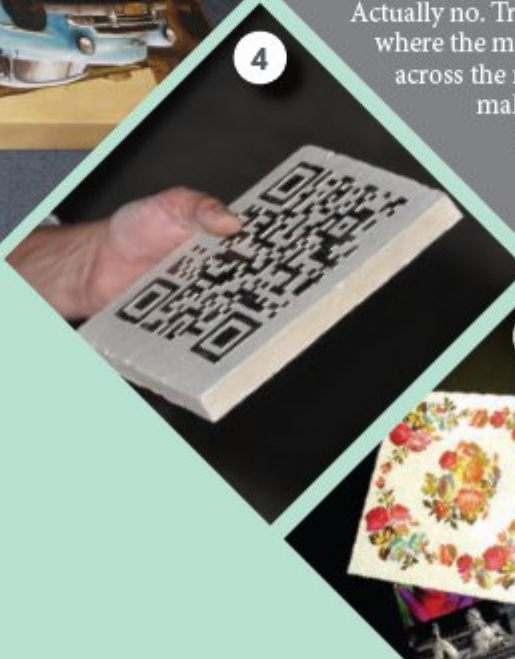
4. Ceramic Tile Mold
Print multiple layers of ink to make 3D master, which is then used to create ceramic tile mold.

5. Ceramic Tile - Direct Print
Varnish top coat can be applied for added protection after printing.

Don't all printers have perfect registration?

Actually no. True flatbed printers are the only printers where the media stays still and the printhead moves across the media and applies the ink. This method makes it extremely easy to do double sided prints as well as aligning any abnormal shaped object on the printing surface.

6. Insulation
Sound insulation panels compressed before cutting.

7. Frames for Mirrors
Create wild and wacky mirrors by printing tin frames using the White Ink Option.

8. Tabletops
Print on a variety of different materials to create stunning table tops.

9. Steel Tanks
Print on pre-cut 2mm flat steel plates then form into cylinders.

10. Product Component Printing: Vacuum Gauge
Print on gauge face and assemble after printing.

11. Maquette: Architectural Model
Go beyond the blueprint by printing and cutting 3D architectural models.

12. Food Pouch
These food packages were printed on polyethylene for use on the International Space Station in 2013.

13. Scale Model
When the real thing is too big or difficult to transport, detailed scale models can be created easily by printing on foam-board material then cutting on the Océ ProCut.