



Print Technologies and Sustainable Materials

February 2009

PRINTING TECHNOLOGIES

LightJet - OCE LightJet 430

Traditional high-quality photo processing from digital sources. True continuous tone photographic printing. Media choices include matte, gloss and metallic finish papers as well as backlit duratrans for lightbox applications. Ideal for indoor posters and point-of-purchase displays.

Aqueous Inkjet - HP DesignJet Z6100

Wide format inkjet printer used to produce continuous tone quality rivaling LightJet quality with a much wider color gamut. Ideal for photo quality, indoor applications on a wider variety of media than LightJet. Prints up to 59" wide.

Latex InkJet - HP DesignJet L65500

Sustainable printing technology designed to replace traditional solvent printing. Uses new HP latex ink that eliminates VOC's. Very high quality resolution and color accuracy at a very reasonable price. Prints up to 103" on a wide variety of media. Utilized for small format ferroX™ applications as well as banner and backlit applications. Can be used indoor or outdoor with a life span of 3-5 years. Portland Color is one of 6 early adopters of this technology, the printer having been installed in November of 2008.

DTS (Direct-To-Substrate) - HP UV Curable FB6100

Direct-to-substrate, UV curing flatbed printer. Exceptionally high quality resolution. By printing directly to many types of board substrates, it eliminates the process and cost of mounting. Finish is also extremely durable and doesn't need protective laminates. There are many media choices, including large format ferroX™ magnetic applications, several rigid boards and a few fabrics. Simple, fast, and very cost effective.

Dye Sublimation Fabric - HP Scitex XLJet 1500 and Roland SJ1045

Our primary fabric printing technology. Grand format to 10.5' wide by very long lengths if needed. Images are first printed to paper; this transfer paper is then run through a large heat press sandwiched with fabric. The combination of heat and pressure from the press converts the ink into a gas which is then sublimated – chemically bonded at a molecular level – into the fabric. Very high quality image at a very large scale, very durable, and offers tremendous shipping savings over vinyl. All fabrics are coated for fire resistance, meeting the highest US and international standards. Many fabric choices are available. Dye sub prints produce no glare, making them ideal for heavily lit environs such as retail interiors and tradeshow.

SUSTAINABLE BOARDS & SHEET GOODS (current as of February 1, 2009)

ferroX™

Graphic system using a magnetic base receptor coupled with an easily changeable, ferrous oxide-backed face print. Reduces production and post-use waste, while also significantly reducing production cost associated with mounted substrates. Radically cuts shipping costs. Reduces carbon footprint of both production and shipping. Unlimited sizing potential.

BloxLite

FSC certified paper product. Utilizes efficient double-sided printing on optically opaque base. Combined with the HP Latex printer, this is a low-cost, highly sustainable option to vinyls. Recyclable in common paper stream. 61" and 54" widths.

CitiLite

FSC certified paper product. Designed for backlit applications such as transit shelters and store window light-boxes. Combined with the HP Latex printer, this is a low-cost, highly sustainable option to vinyls. Recyclable in common paper stream. 61" and 54" widths.

Polypropylene

Utilized for high quality aqueous inkjet banners. 59" width. Commercially recyclable using Resin Code 7.

Styrene

UV direct printable polystyrene based board. Standard size is 48" x 96" in several gauges. Limited recyclability. New offering is biodegradable.

Sintra

PVC based plastic board. Multiple gauges available, 48" x 96" standard size. Can either be printed via UV direct or used as a base for mounted prints. Limited recyclability.

Re-Board

UV direct printing on 3/8" or 5/8" gauge. Board size 63" x 86". Recycled content, can be recycled in common paper stream.

EarthBoard

50 pt. cardstock. Can either be printed via UV direct or used as a base for mounted prints. Recycled content, recyclable.

Insite Reveal Bio

3/16" gauge, biodegradable foamcore. 48" x 96" boards, white only. Can either be printed via UV direct or used as a base for mounted prints.

ECOLogic PP

UV Direct printable polypropylene-based banner media that is 100% recyclable. Heavyweight material used for indoor and outdoor banners. Can be recycled commercially using Resin Code 7.

EcoMedia UV

UV Direct printable, polyethylene-based film with a biodegradeable additive. Used for indoor banner applications and window films.

SUSTAINABLE FABRICS (current as of Feb 1, 2009)

Micron Mesh

Sheer material used for layering effects and/or softening spaces. 100% recycled polyester content. 120" width printed via dye sublimation. Can be recycled in specialized waste streams via commercial handlers.

Eco Celtic

Heavy poplin-like material used for banners. 100% recycled polyester content. 122" width printed via dye sublimation. Can be recycled in specialized waste streams via commercial handlers.

Eco Trapeze

90% recycled polyester content, 10% lycra polyester for stretch. 122" width for tensile fabric structures printed via dye sublimation. Can be recycled in specialized waste streams via commercial handlers.

Heavyweight Celtic

Heavier version of EcoCeltic used for banners. 100% recycled polyester content. 122" width printed via dye sublimation. Can be recycled via commercial handlers.

Drop Screen

Rice paper-like material. FSC certified paper content combined with recycled polyester produced in France to highest ISO 14001 standards. 94" widths printed via dye sublimation. Can be recycled in specialized waste streams via commercial handlers.