

# Océ Wide Format Technologies

# Canon



# **CAD/GIS Overview brochure**

A range of homegrown technologies, geared for wide format printing
Each of them addressing the needs for specific markets
Each of them including a range of innovations
Each of them setting new industry standards

## How Océ MediaSense works



Input

The media type is automatically fed.

The gap between the printhead and media is automatically calculated as the media is fed onto the printing surface.

Based on the type of media, the paperfeed is adjusted properly to the media thickness.

Océ MediaSense ensures optimum print quality output.



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# Océ MediaSense technology

# Automation to extend your media versatility

For most printers, the print gap between print heads and the media becomes too small when printing on thick media. This can result into poor print quality or worse: into print head collisions and jams. That's why Océ MediaSense technology has been developed, which automatically adjusts the optimum print gap between the media and the print head once for every type of media. This allows you to print on thicker media (up to 32 mil), gives you the ability to grow your application offerings for a faster return on investment and to better serve your customers.







- Océ MediaSense enables you to print high quality output on a large range of media, without having to do manual adjustments.
- Seize business opportunities by offering high quality output regardless of the media type.



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### Océ ClearConnect software suite

### Workflow without the work

The Océ ClearConnect software suite consists of a variety of applications that all have the same user interface, which makes it easy to get documents where you need them, when you need them. Use the desktop job submission software Océ Publisher Select 3 to efficiently manage complex document sets. Install Océ Publisher Mobile to print from any mobile device. Use Océ Publisher Express to print from any webbrowser, Océ Wide Format Printer Driver 2 to print from any application, and the ClearConnect user panel to submit directly to the print engine.



True to its name, the Océ
ClearConnect software suite makes
the right connections to provide a
seamless workflow.



### How Océ PAINT works



## Before printing

The printer checks the status of each printing nozzle by sending an acoustic pulse and cleans a specific nozzle if required in just seconds. This decreases maintenance and waste and increases system lifetime.

# During printing

The printer can detect and compensate a nozzle failure per swath so a print is not ruined and high throughput and productivity are maintained.

# Over the entire system lifetime

The printer measures and corrects the actual drop size to ensure consistent print quality and color matching, print after print, year after year.

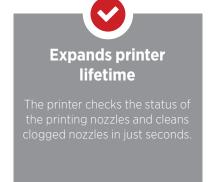
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# Keep the quality of your print output consistent, automatically

With any printer, dust particles and paper touches can cause printing nozzles to fail, resulting in a thin white line on prints. Océ PAINT technology (Piezo Acoustic Integrated Nozzle Technology) applies sophisticated diagnostics, maintenance and error corrections to overcome common nozzle issues that occur with conventional inkjet printers – even while printing.







- Océ PAINT technology predicts nozzle failure before printing and ensures drop size correction during the entire lifetime of the printer.
- Thanks to Océ PAINT technology, no user intervention and no daily maintenance is required. The printing system will perform maintenance fully automatically, ensuring print quality and high reliability.





Print and scan to the cloud from your desktop, mobile device, user panel, USB flash drive, or network. Save time and avoid costly printing mistakes with easy shortcuts.

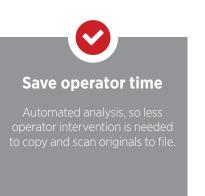
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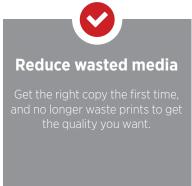
# Océ Image Logic technology

# Turning imperfect originals into perfect copies and scans

Scanning and copying large format documents is a time-consuming task, even if the quality is right the first time. Unfortunately, scans and copies often have to be redone, because the settings aren't optimal and the result fails to meet your requirements. This is even more time consuming, expensive and frustrating. Océ Image Logic is an intelligent, easy-to-use solution that helps you consistently turn imperfect originals into perfect copies and scans without any hassle.



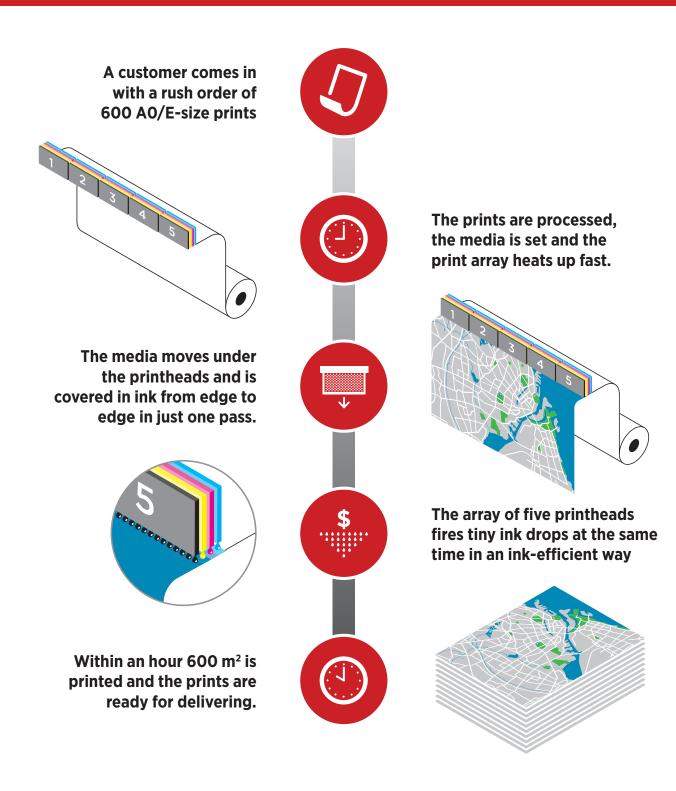




- With Océ Image Logic, you don't have to try out complex manual settings to ensure high-quality print output. This makes your work simpler and saves time.
- Océ Image Logic optimizes your scan quality and simplifies your scan process.



# How Océ Single Pass works



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# Océ Single Pass technology

# High-volume production printing in just one pass

Imagine that you can produce over 600 square meters (6,400 square feet) of technical drawings, maps or high-end posters in just one hour, irrespective of the media or finishing method. This is possible with Océ Single Pass technology, which enables printing in one pass without moving the printheads back and forth.

This instant-dry, high-speed color printing technology uses low amounts of ink. The excellent results are achieved with five fixed printheads that cover the full width of the media, require minimal warm-up time and fire millions of tiny ink drops per second. The technology uses special inks for rich colored prints with the finest details. This makes Océ Single Pass the ideal technology for commercial and industrial environments with a consistently high print volume.



#### Single print array

that can fire over millions of tiny ink drops per second from more than 350,000 nozzles.



With Océ Single Pass technology, you don't have to choose between quality and productivity



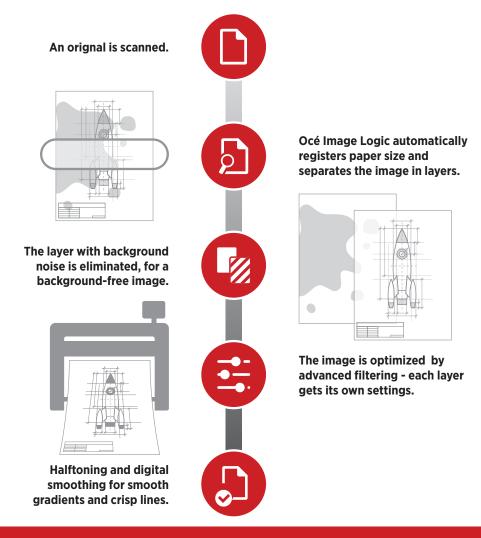
#### Cost and ink efficient

architecture and dye ink enable instant-dry printing with minimal energy use at low costs

- Consistent high speed printing for fast turnaround times and maximum productivity.
- Océ Single Pass technology: no moving parts, ink efficient and truly high productivity at low costs.



### How Océ Image Logic works



# Océ Image Logic compared to other image processing technologies

More scans and copies in less time



Reduce expensive and time-consuming re-work.
With Océ Image Logic, the goal is to get you the perfect scan the first time, 99% of times.
Océ Image Logic finds the right settings for you, immediately

More accurate print output



Other image enhancement methods usually analyze only the first 2 inches of the original. Océ Image Logic analyzes and enhances every pixel of every line in real time, from the top of the original to the bottom.

Improve on imperfect originals



Océ Image Logic compensates for dark backgrounds and folds in the paper to produce superior results without losing information. Océ Image Logic splits up the scan in multiple layers, and applies individualized settings to each layer separately.

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# Océ POWERsync technology

# The controller which maximizes your productivity

Controllers have to perform several tasks at the same time. The POWERsync controller has state-of-the-art technology to provide sufficient processing power, as well as a unique Multi Memory Architecture to efficiently handle multiple tasks at once (RIP\* while scan, scan while RIP).

The Océ POWERsync controller can be embedded with a unique end-to-end support of PDF workflow. Adobe PDF Print Engine, for example, guarantees you optimum print quality of your technical print jobs.

\*raster image processor





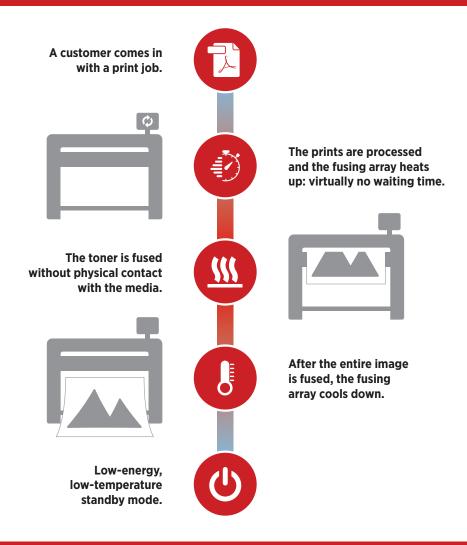


The Océ POWERsync controller ensures high productivity, perfect print output quality, intuitive and an easy-to-use tablet-like user interface.

Thanks to Océ POWERsync you will get the best workflow, today!



## How Océ Radiant Fusing works



### Advantages?

#### **Instant-on availability**



Your printer is always ready to use: the fusing array heats up in seconds. This results in shorter print times

## Sharper print output



In the Océ Radiant Fusing process, toner is fused without physical contact with the media. In conventional technologies, the pressure rollers smash the toner into the media, which can blur the printed image.

## Lower energy consumption



Océ Radiant Fusing printing systems use only 39 watts in standby mode, and generate less noise and heat. Roller-based large format products frequently draw 1,000 watts in standby mode, because their pressure rollers must stay heated in preparation for the next job.

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## Océ Radiant Fusing technology

### High-quality printing, short print times

A large format printer that does not consume unnecessary electricity in standby mode and is still ready to use within seconds? With Océ Radiant Fusing technology, you can achieve both. With instant-on printer availability and virtually no warm-up time, the eco-friendly Océ Radiant Fusing technology consumes less energy, realizes shorter print times and produces less noise and ozone compared to other toner based large format printing systems. Océ Radiant Fusing: consistent quality – year after year, print after print.







- Océ Radiant Fusing combines short print times with high-quality output.
- With Océ Radiant Fusing technology, you can have it all: speed, productivity, high quality and energy savings.

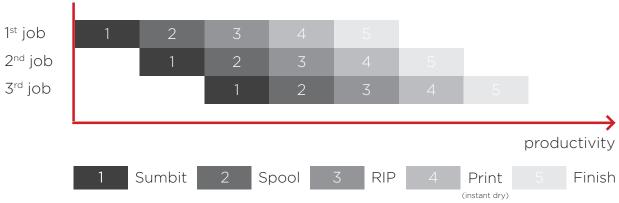


## How Océ POWERsync works

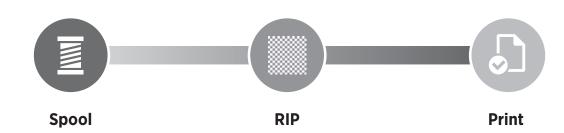
#### Sufficient processing power, no matter how complex your print job is.

The Océ POWERsync controller architecture is built to maximize your productivity. Whether your prints are monochrome or full color, even on high speeds: Océ POWERsync has the architecture you need, for time saving operations and high performance.

#### Concurrent architecture for highest productivity\*



\*this graph is a conceptual representation



The print description language file (PDL) is spooled on the hard drive.

The PDL is converted to an internal print file by the embedded RIP.

The internal print file is sent to the print heads resulting in high quality and fast print speeds with virtually no hick-ups.

## Advantages?

The POWERsync controller not only has state of the art technology to provide sufficient processing power, but also has unique memory architecture.

Firstly, the (multi-) hard drive setup to separate the set memory from spooling jobs. Regardless of the number of jobs submitted, the printer maintains its productivity, which reduces expensive waiting time. Secondly, the POWERsync controller has an unusual large RAM memory, which is much swifter than any hard drive.

Competitor products deploy 'virtual RAM' on the hard disk to deal with heavy workload, thereby swapping data between RAM and hard drive.

However, swapping has a negative effect.

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# Océ CrystalPoint technology

# The best of the world in toner and inkjet in an entirely sustainable process

Choosing between printing technologies is not easy, especially if your printing needs include an extensive mix of applications: line and text prints, full-color photo prints and mixed sets of color and black & white. Should you opt for an LED toner printer, with superior media independence, no feathering and instant-dry prints? Or for an inkjet printer, clean and with highly accurate dot positioning on expensive coated media?

With Océ CrystalPoint technology, you can have the best of both worlds: crisp, high-quality color and black & white prints, even on plain and recycled paper. It is ideal for a wide range of applications including CAD plots, GIS documents and graphic arts.



#### Benefits of the world of toner

No feathering
Instant dry



#### Benefits of the world of inkjet

Versatile in applications

Highly accurate dot positioning

Clean technology: no ozone, no powder

Now, you can enjoy the benefits of both toner and inkjet technology, while avoiding their drawbacks.
With Océ CrystalPoint technology, you truly get the best of both worlds.





## How Océ Crystalpoint works

Océ CrystalPoint works on the principle of Solid In - Solid out, for a clean system and no risk of air pollution.



#### **Océ TonerPearls**

Océ TonerPearls are small, solid pearls that replace ink. The pearls are round and easily roll into the system. The TonerPearls come in see-through cartridges, so you can always see the remaining toner level per color in the system.

#### **Toner Gel Jetting**

Once the TonerPearls are fed into the system, they are gelified into a toner gel. This gel is then jetted onto the media by the Imaging Devices. The gel droplets are positioned with extreme precision and keep their shape even on recycled paper. This ensures crisp print quality with no feathering.

#### **Toner Crystallization**

The toner gel will start crystallizing only after it has achieved a "good grip" on the media. After crystallization, the toner is extremely well bonded to the media: the robust prints dry immediately and are also perfectly suitable for outdoor use.

## Advantages?

# Consistent quality, media independent

The toner gel ensures strong adhesion to a wide range of media, and sharp lines without feathering for highly accurate fine details. Since Océ CrystalPoint works with any media, even recycled uncoated paper, you no longer need to invest in expensive, heavy, glossy paper for crisp glossy or semi-glossy prints.

#### Increased productivity

Prints made with
the Océ CrystalPoint
technology are robust
and dry instantly.
Handling, stacking and
folding can take place
immediately, and you
don't have to switch
media for the various
applications you need.
Enjoy your improved
productivity.

#### **Sustainable process**

With Océ CrystalPoint, you will experience no ozone emissions, no odor, no system contamination by powder or ink and minimal waste disposal. The toner waste is solid and completely non-toxic, and can be disposed of as part of regular office waste.

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