



SAVING INK WITH SPIRALS

THE POWER OF IOT

TAKING PROCESS-FREE TO THE NEXT LEVEL

SOLUTIONS FOR
COMMERCIAL AND
PACKAGING PRINTERS

YOU
PRINT.
WE
CARE.

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YOU PRINT. WE CARE.



Christian Tebroke, CEO of ECO3

As a member of the ECO3 family, I would like to extend a warm welcome. Before we dive into our exceptional products and services, I want to share a few words with you about our mission.

ECO3 is a leading global supplier of prepress solutions to the offset and flexographic printing industries. We are driven by a deep commitment to your success. Around the world, commercial, newspaper and packaging printers rely on us for the most extensive range of integrated solutions.

Through research, development and implementation of cutting-edge technologies and practices, we strive to deliver solutions that help you excel across three dimensions – **E**cology, **E**conomy, and **E**xtra **C**onvenience, or simply ECO3.

We are pioneers in sustainable innovation for the printing industry. We design each ECO3 product carefully to boost productivity, deliver excellent quality, reduce costs and champion sustainability for your business at every stage.

Creating integrated solutions for our customers, seamlessly connecting consumables, equipment and software into one system, makes us the preferred partner for thousands of offset customers around the globe. Now, we are deploying this same considered approach for repro houses and printing companies in the flexo industry.

Our eco-friendly solutions deliver outstanding performance, combined with local service, giving our customers the peace of mind they seek.

You print. We care.



About ECO3

Headquartered in Mortsel (Belgium), ECO3 is an integrated solutions provider for commercial, newspaper and packaging printers. From driving innovation with R&D to supporting customers with excellent service, we have got you covered with printing plates, CtP systems, workflow and print management software, and pressroom chemicals.

1,500+

employees

200+

service engineers

ALMOST
10,000

software installs

MORE THAN
5,000

equipment installs

Sales & service

With direct sales and service organizations in more than 30 countries, ECO3 is always nearby. Whether remote or on-site, support is readily available to our customers around the clock, every day, in their local language. This global network underpins our "You Print. We Care." ethos, which we realize day in and day out across the globe.

Research & development

ECO3's R&D centers ensure that we always stay at the forefront of innovation to deliver state-of-the-art, eco-friendly solutions that drive value for our customers.

"This strong commitment to great customer service that we have experienced over the years is impressive, and this is one of the main reasons why our partnership with ECO3 will continue. Help is always at hand with local engineers who speak the local language."

HENRIK KAILOW, CEO, KAILOW GROUP – DENMARK

"ECO3 is the right partner for us, as they are always ahead of technology and innovation and continuously strive to improve, making our products better in the end."

ALLAN LAURSEN, DIRECTOR OF OPERATIONS, SCHUR PACK DENMARK A/S

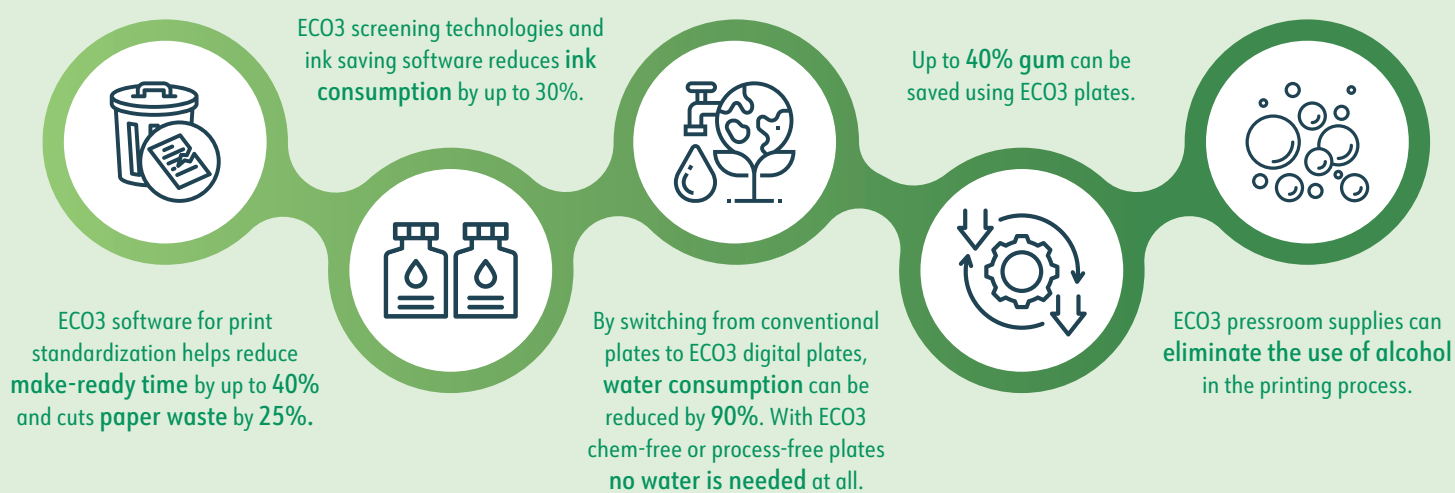
Plate manufacturing

Offset printing plates are high-tech products. ECO3 knows that only a meticulous production process – leaving nothing to chance – will yield top-quality products that deliver flawless prints that satisfy both printers and buyers. Quality must remain constant to meet customers' needs. All ECO3 offset plates conform to the ISO 12635 standard, which specifies width, length and thickness and is very specific regarding tolerances. Our production sites in Wiesbaden (Germany), Suzano (Brazil) and Wuxi (China) hold the ISO 9001 Quality certificate, the ISO 14001 Environmental certificate and the ISO 50001 (DIN 16001) Energy certificate. Having production plants worldwide minimizes transportation distances and offers significant ecological advantages by reducing carbon emissions and promoting local sustainability.

"There are no passengers
on spaceship earth.
We are all crew."

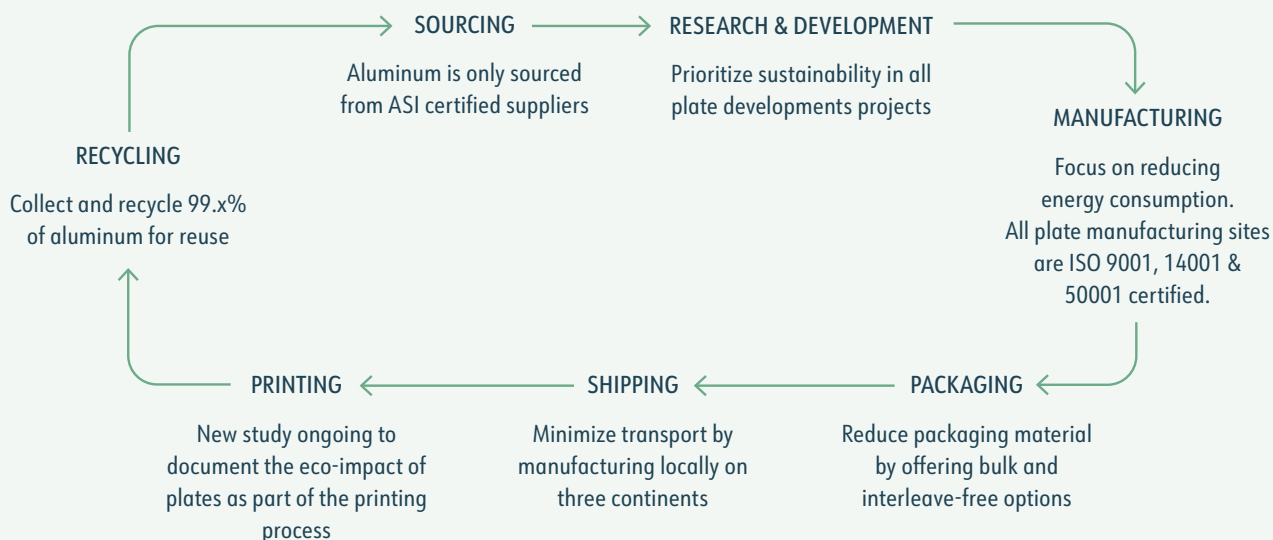
MARSHALL MCLUHAN

ECO3 helps you meet your sustainability goals...



...and we do our part.

This graph shows our eco-program for offset printing plates.





Taking process-free to the next level

The latest example of ECO3's Total Solutions approach is Eclipse Pro, an ultra-convenient process-free offset plate for an easier and smarter way to print. This plate brings together eco-friendliness, efficiency and cost-effectiveness in one convenient package to meet customer demands.

Developed for sheetfed printing, Eclipse Pro has been brought to market with the specific needs of commercial printers in mind. With enhanced contrast, extra convenience and attractive cost savings, it allows printers to produce consistent, high-quality output over a wider range of printing conditions. In fact, it requires no major changes to the existing setup. Just drop it into the workflow in place of a conventional plate and start printing.

This eco-friendly process-free plate will also help printers significantly reduce waste of paper, ink and time, answering the universal calls for higher sustainability. Eclipse Pro comes with excellent and stable image contrast that lasts beyond 24 hours even when exposed to office light. This is a huge benefit in terms of visual inspection and correct mounting on press as well as storage options.

The scratch resistance is also remarkable for a process-free plate, making handling easy and guaranteeing high print quality, every time. Moreover, it is suitable for conventional as well as H-UV/LED-UV inks, which gives printers a higher level of flexibility in their daily production.



"The excellent and stable image contrast, along with the swift start-up of Eclipse Pro, makes it stand out among other process-free plates. I would definitely recommend Eclipse Pro to other printers"

ROBERT LINDAHL, PRINTER, RISBERGS – SWEDEN



Choosing chem-free for flexibility

Sustainability, quality and consistency are important factors shaping the printer's choice of plate type. When it comes to eco-friendly printing, ECO3's Adamas chem-free offset printing plate stands out as a unique solution. Addressing a wide spectrum of applications, from commercial to packaging sheetfed UV printing, it maintains strong eco credentials while delivering top-notch quality.

Using a dual-gum cascade system with an impressive bath life, Adamas eliminates the need for rinse water. In comparison to conventional systems, this amounts to an impressive 80% reduction in waste.

Requiring minimal pre-press investment, Adamas offers a durable surface that facilitates easy handling and strong image contrast. This allows for easier visual inspection and registration on press or in plate automation systems. Adamas strikes the perfect balance between pre-press sustainability and press consistency, emerging as a compelling alternative to process-free plates.



"Most of our clients score us on our Corporate Social Responsibility initiatives. Adamas cuts our water bill in half, which is a huge deal in Cincinnati. We're saving more than 140,000 gallons of water annually. That's like seven swimming pools. From my perspective, the plate hits it out of the park. Adamas, PressTune, and SPIR@L screening help us differentiate as environmentally responsible print manufacturers."

KEN RELLAR, OWNER, RPI – USA



Process-free or chem-free?

When deciding between using process-free and chem-free printing plates, a number of factors must be considered. Process-free plates bring more pre-press efficiency because they don't need processing liquids or special equipment and maintenance. However, they may suffer from lower and unstable image contrast, leading to potential issues for automated workflows and on the press. Their limited office light stability and sensitivity to manual handling also pose challenges. Finally, process-free plates use the printing press to develop, which has an impact on the lifetime of the rollers and blankets. It also requires better press maintenance.

Chem-free plates, meanwhile, offer superior contrast, light stability and handling resilience. They provide a wider press latitude and are compatible with different inks and founts. With no start-up procedure needed, they also reduce make-ready time and paper waste.

Ultimately, the choice depends on the printer's needs and priorities, so it's important to look carefully at the unique benefits of each type of plate. ECO3 offers both, as one size does not fit all.



ECO3 offers a wide range of digital offset plates, from conventional to process-free, so that you have a choice. Select the printing plate technology that fits your jobs, presses and requirements. Scan the code to discover our full portfolio.



From computer to plate

Printers in the commercial and packaging markets require high quality equipment that deliver the exact power required to succeed. ECO3 addresses these needs with its versatile thermal platesetters, catering from small to large-scale operations. The Avalon series offers a wide array of options, accommodating diverse needs. With a capacity of up to 2,280 x 1,600 mm, covering the size for 80-page heatset presses and a rapid throughput of 70 B1 plates per hour, these thermal platesetters excel in both productivity and flexibility.

Importantly, Avalon platesetters can expand with the growing needs of the business. All entry-level engines feature manual loading but can be combined with a single or multi-cassette autoloader for increased automation and operational flexibility. For the high-end Avalon engines, there is also the opportunity to implement a pallet loader or a robotic plate loader, taking productivity to an even higher level. In addition, the engines can be seamlessly integrated with Apogee and Amfortis workflows.



From entry-level platesetters to high-end CtP engines – the Avalon 8-up series of thermal platesetters has a best-in-class solution in store for every need. Simply select the engine that suits your needs in terms of throughput speed (from 24 to 70 plates per hour), features and scalability, and start boosting your business.



The Avalon N VLF series comes in different levels of automation to match your preferred workflow and available floor space, yet consistently offers prime imaging quality. All platesetters are equipped with Grating Light Valve (GLV) imaging technology, enabling the spotless transfer of your digital creations directly onto the printing plate.

Automating repetitive tasks for growth

One of the key advantages of using robotics in plate loading automation is the tremendous impact on productivity.

With the ability to match a maximum throughput of any commercial CtP and facilitate hours of uninterrupted production, a robot significantly boosts output. Furthermore, the integration of robotics allows for the effortless addition of new plate formats, providing more flexibility for diverse printing requirements.

ECO3's robotic plate loading solution saves substantially on floor space through customized installations. It also frees up more of the operators' time, allowing them to focus on strategic activities and enhancing their well-being.

Fully integrated with ECO3's Apogee or Amfortis workflow software, robotics contribute to sustainability by enabling efficient plate packaging, reducing waste and creating a greener environment.



"One of the benefits is that people working in prepress no longer have to be in the CtP area. They can work on preparing jobs while remotely monitoring the robot's progress on the screen. Installing a robotic plate loader saves our employees from lifting 230 tons of aluminum per year."

NIELS HENRIK NIELSEN, PREPRESS MANAGER, STIBO COMPLETE – DENMARK



"With the old system, we had to load plates three or four times a day, which was very time-consuming. The new robotic loader can handle a whole pallet of plates, enough for at least 14 days. This frees up a lot of time for our operators to take on other tasks in production or the plate department."

ALLAN LAURSEN, DIRECTOR OF OPERATIONS, SCHUR PACK DENMARK A/S

The ultimate productivity boost



1
Printing plates are stacked emulsion down on a pallet. The front of the picking arm lifts up the plate.



2
The picking arm turns 180° to pick up the interleaving paper with the other side.

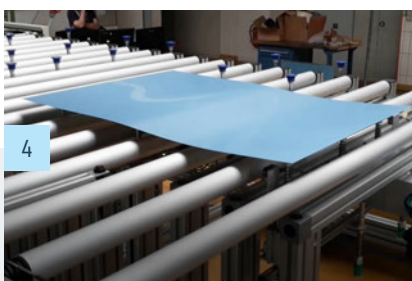


3
The arm moves to the waste bin and drops off the interleaf.



"We run with more than one plate format; therefore, a pallet loader was not a solution for us. We went for the robotic solution which makes us much more flexible now and also in the future, if we are going to add more plate formats. We would definitely recommend the robotic solution to other customers. The efficiency and reliability of the robot is very high, it works smoothly."

STEFFEN LAURSEN, PEOPLE, PROCESS AND IT MANAGER, LAURSEN GRAFISK – DENMARK



The plate is delivered to the transfer table...



... from where it moves into the CtP unit.



An interactive GUI displays all movements and warns when restocking is needed.

Making the work flow

ECO3 provides modular prepress workflow solutions with three main advantages. First of all, they can be tailored to fit any company's size or workload, ensuring smooth operations regardless of scale. Secondly, they cover the entire process from online order intake to plate output and data transmission to the finishing equipment, making operations more efficient. Thirdly, they support various print applications, from commercial print and packaging to wide format.

The high versatility of the workflow is essential as it enables printing companies to easily expand their product ranges to remain competitive. It means that a single platform can meet many different needs, while at the same time increase productivity and satisfy customer demands.

1 SHORTEN DEADLINES

Use the integrated e-commerce and online approval portals to increase job throughput and customer loyalty. Give your customers 24/7 access to your services.

3 INCREASE PREPRESS EFFICIENCY

Automate standard or repetitive jobs while also reducing the risk of errors. Generate new orders automatically or integrate all print processes using industry standards like XML and JDF/JMF.

5 EASILY HANDLE COMPLEX ARTWORK NESTING

Take control of your packaging production with an integrated solution that supports standard CAD formats, automatic snapping of artwork, dynamic bleed handling and automatic overlap handling.

7 ONE SYSTEM, MULTIPLE OUTPUTS

Lower complexity and overhead by using a single ECO3 workflow to manage print production and output to CtP systems, digital presses, proofing printers and even wide format engines.

2 IMPROVE PRINT QUALITY

Built-in color and quality management tools enable 'First time right' print production thanks to innovative screening, AI-based image enhancement and extended color gamut support.

4 IMPOSE WITHOUT BOUNDARIES

Let your workflow dynamically create the most optimal press sheet layout, and apply last-minute press or paper changes in just a few seconds.

6 GET IT ALL DONE WITH A SINGLE WORKFLOW

Reduce hardware needs and training costs. ECO3 workflow solutions can handle commercial, packaging and large format printing with a single solution.

8 KEEP ROOM TO GROW

ECO3's workflow solutions are scalable and can handle any workload. Scale your workflow together with your business. Add render capacity during high season. Or add specific functionality for a dedicated project.



Book a demo

A personalized demo is the best way to discover how our workflow solutions meet your needs. Demos can take place online, on-site or in one of our demo centers, depending on what is most practical.

Saving ink with spirals

An interview with Els Van Cauwenberghe,
ECO3's screening guru



Els Van Cauwenberghe

Coldset, heatset web printers and packaging offset sheetfed printers can enjoy the benefits of SPIR@L, a revolutionary screen methodology developed by ECO3's R&D team. We had a chat with Els Van Cauwenberghe, the team member in charge of implementing the new screening technology.

Why are you so excited about SPIR@L?

SPIR@L is a great software tool that's setting a new quality standard in offset printing. Very specific to SPIR@L screening is the shape. Instead of letting a round dot continue to grow at its borders, like the name suggests, it grows inside a spiral. So, you don't end up with a mountain of ink on a single dot but with several small hills of ink, resulting in a thinner ink layer and crystal-clear images every time!

What are the benefits of using SPIR@L?

The concept is very straightforward: because the traditional offset ink dot is replaced with spirals, you need less ink to fill the same area, while maintaining the high quality level. With SPIR@L, you can achieve up to a 12% reduction in ink for any sheetfed application, plus you can hold a 1-99% dot at higher frequencies without any additional effort. This gives you vibrant colors while reducing image slur or visible CtP artifacts.

Is SPIR@L expensive to use?

No, SPIR@L doesn't require any costly upgrades to your CtP system or the printing press. In addition, the thinner ink layer allows you to run the press faster without having to use anti set-off powder, so productivity goes up. You can also expect fewer expensive press stops caused by the web breaking. I can safely say that high-quality offset printing has never been more cost-effective and profitable!

Will SPIR@L make a real difference?

SPIR@L can be a crucial game-changer when you're handling challenging substrates, such as cartonboard or thick paper. With the right SPIR@L screening, you will not only use less ink, but also enjoy faster drying. So, it will bring energy savings, as well as more convenient handling on press and during finishing. I've seen these fantastic benefits with my own very critical eyes during many customer visits.

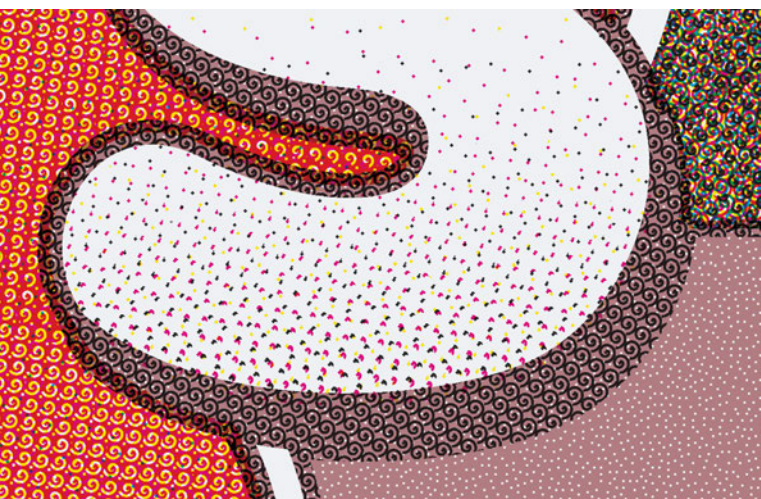


Download the SPIR@L White Paper, which describes how the technology works, how it compares to other screening solutions, and which benefits SPIR@L offers.

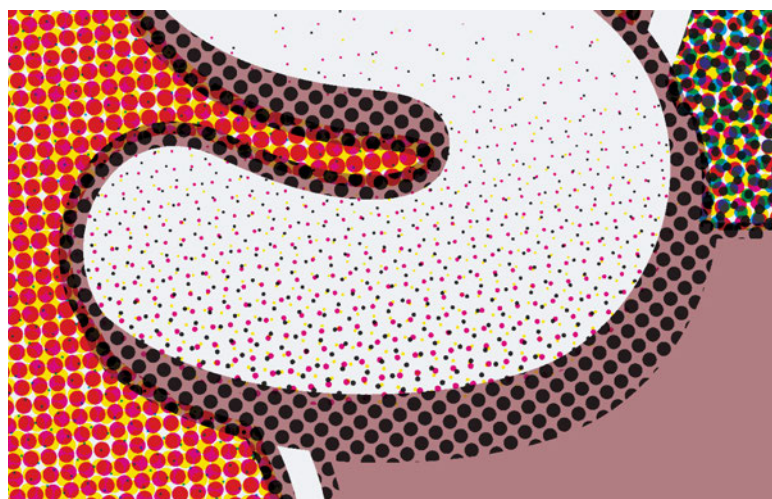
Improving press stability

Reducing unwanted downtime and enabling faster job throughput will allow printers to reap considerable productivity gains and a competitive advantage. This can be achieved by reducing ink consumption – even in the solids – with SolidTune, ECO3's unique print optimization software tool.

SolidTune lowers ink consumption by an average of 3%, a saving achieved by applying a randomized pattern to the solids, dots and text during rendering. This process generates small holes that allow the ink to spread more evenly. The holes are not created near edges to ensure a crisp and sharp print result.



Enlargement of a CMYK + spot color job, showing SPIR@L screening and SolidTune (the dots in the brown spot color in the bottom right corner)



Same enlargement of a CMYK + spot color job, with traditional screening

Offset printers in various segments will benefit in the following ways:



Offset packaging printers have the advantage of significantly **quicker drying times**, resulting in reduced warehousing costs and faster delivery to customers.



Heatset offset printers will use **less energy** for drying, making producing books, magazines, catalogs, flyers and commercial print **cheaper** and **more sustainable**.



Coldset offset printers producing newspapers and paperback books will see **ink usage drop**, **fewer web breaks** and **less see-through**, leading to **cost reductions**.



Use the ECO3 savings calculator to get an estimate on how much ink you can save using SPIR@L, InkTune and/or SolidTune. To guarantee accuracy, the analysis will be based on your own print jobs.



CMY



K



CMY



K

Conventional screening without InkTune

Conventional screening with InkTune

Reducing ink consumption

ECO3 offers several product innovations that can contribute to substantial cost savings, lower waste and higher productivity. One of these is InkTune, an intuitive software solution integrated into the prepress workflow. Working its magic during the rendering process, InkTune can lower the ink consumption of a print job by as much as 30%. And it does this while maintaining the same great print quality.

By replacing a proportion of the expensive CMY inks with more affordable black, InkTune delivers a whole host of benefits. These include reduced total ink coverage, optimized ink settings, less interference between different inks, shorter drying times, improved color consistency and quality, and optimal press stability even at higher printing speeds. The result is higher quality print, perfect reproduction and increased consistency, coupled with a reduced environmental footprint.



"PressTune and InkTune have helped us produce more work with the same number of employees and within the same number of hours."

AHARON GREEBEL, VICE PRESIDENT, AJ IMAGES – USA

Streamlining the print process

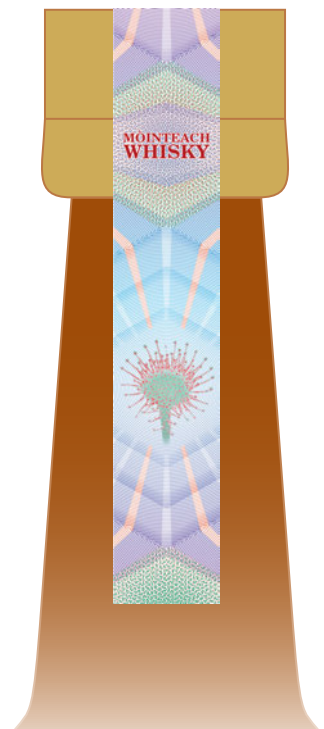
Full control of the print process is key to driving consistency, productivity and the ability to print to exacting standards. Working smarter not harder is essential in this respect. As a unique tool for effective print production control, PressTune is an innovative standardization solution that streamlines and optimizes production.

PressTune analyzes data from the press, using it to dynamically adjust the ink density, which increases productivity by lowering ink and paper consumption. This also guarantees color consistency and ensures that print jobs meet ISO, G7, or client-specific standards. Make-ready times are significantly reduced by up to 40%, which in turn leads to less waste, while real-time reporting improves communication between stakeholders.

Protecting brands and consumers

The continued rise in counterfeiting is one of the biggest concerns for brand owners globally. Fake goods may cause the end-consumers to lose faith in the brand, or, in the worst-case scenario, inflict actual physical harm. Arziro Design is ECO3's design tool that helps protect counterfeit-sensitive documents or items from forgery.

As a plugin for Adobe Illustrator, Arziro Design can be used to create highly customizable, safe and aesthetically beautiful designs with built-in brand protection. It is a powerful security design tool which generates personalized, copy-proof elements that can be applied to all types of products, from food and beverages to beauty and cosmetics, as well as any industrial products. They are added to printed labels and folding cartons using flexo, offset or digital technology.



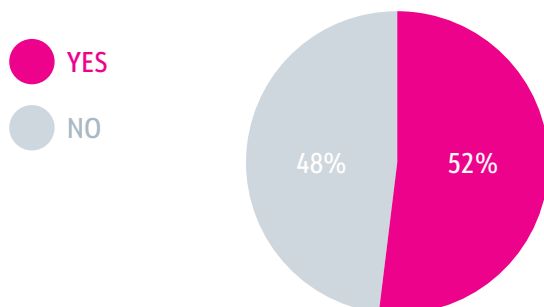
Getting it right from the start

Proofing is crucial to producing perfect results and is an integral part of ECO3's workflow solutions. Proofs are always generated with the same render technology that is also used for plate output, guaranteeing absolute consistency.

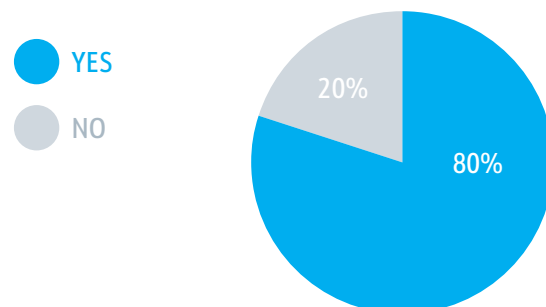
For hardcopy proofing, ECO3 offers complete solutions, including printers, inks and a wide range of APOGEEPROOF media. These consist of different paper types and weights suitable for premium color contract proofing or imposition proofing.

WebApproval is ECO3's online collaboration and page approval solution. It is tightly integrated into the Apogee and Amfortis workflow solutions. As soon as content is approved, the workflow software automatically continues to process the pages or artwork, significantly speeding up job throughput.

Will you invest in hardcopy proofing solutions in the next two years?



Do you use soft proofing?



DATA FROM 2022 GLOBAL PROOFING SURVEY



Global support and service

Great support and services are essential to maintaining customer loyalty. Providing advanced technologies is only one half of the equation; offering services that optimize their performance is the other. For ECO3, that means being present globally and acting locally to help maximize business opportunities for printers.

ECO3 provides the broadest array of services in the industry – from product installations and systems integration to expert training and continuous improvement programs. This is known as the ECO3 Total Solutions commitment, developed to ensure printers can operate efficiently and profitably.

TECHNICAL SERVICES

ECO3's Technical Services team ensures a smooth transition when implementing new technology – whether a new CtP system, a software upgrade, or a consumable. They do this through on-site and online support, operator training, and integration into existing workflows. Customized service contracts cover maintenance, repair, and upgrades, along with prompt spare part delivery and cloud-based prepress workflow solutions tailored for the evolving needs of the print business.

- INSTALLATION
- START-UP ASSISTANCE
- SYSTEM AND NETWORK INTEGRATION
- TURNKEY SOLUTIONS
- SYSTEM REPAIRS
- SYSTEM MAINTENANCE
- SPARE PARTS
- CLOUD SERVICES

EXPERT SERVICES

The Expert Services team conducts thorough analyses of customers' workflows to enhance performance and productivity, offering comprehensive training for process optimization. ECO3's tailored programs extend beyond hardware and software training, fostering employee motivation and pride in their work.

- PROCESS EXPERTISE
- ACADEMY (TRAINING)
 - on-line
 - on-site
 - at ECO3's facilities
- CONSULTANCY
- COLOR MANAGEMENT
- IQA – ISO QUALITY ASSIST
- PREDICTIVE MAINTENANCE (IOT)

Choosing a home for your software

Software subscriptions from ECO3 are available in two models. Either the software is installed on the customer's premises or kept in the Cloud at a secure data center. The decision ultimately depends on the specific needs and preferences of the individual printing business.

Both options offer lower initial costs compared to older-style perpetual licences and benefit from regular updates, ensuring the production workflow always operates with the latest version. Planning the budget is also much simpler as costs can be accurately predicted. In addition, the system can be easily scaled up to align with the evolving needs of the business. Whether it's home or away, ECO3 has your back.

Contrast and compare to find the best solution for you:

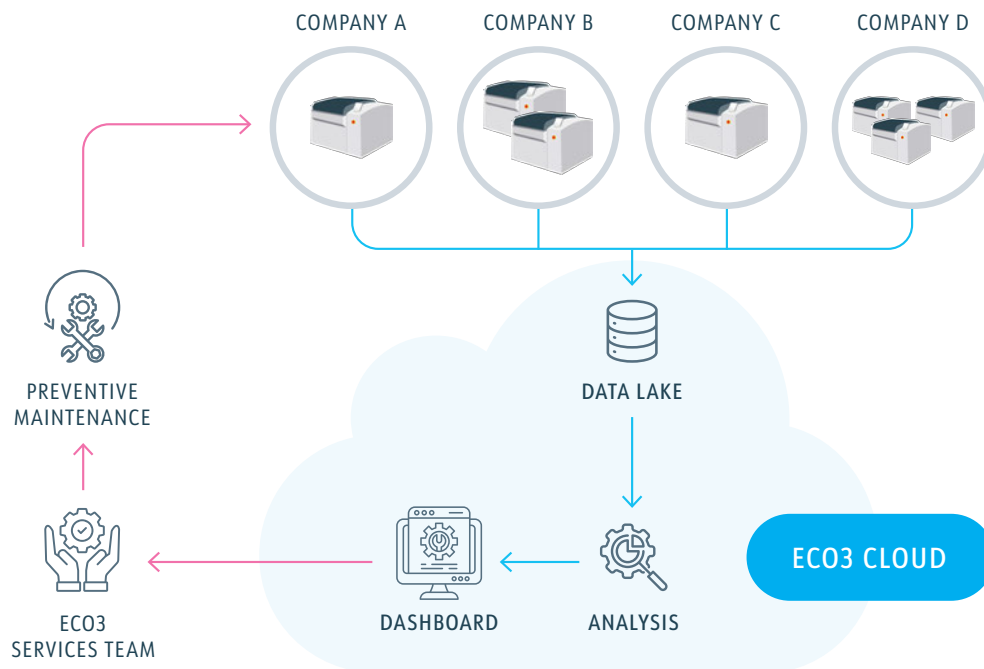


	ON-PREMISE SUBSCRIPTION	CLOUD SUBSCRIPTION
HARDWARE	Upfront investment in server(s) installed in your offices.	ECO3 manages your virtual servers in an AWS (Amazon Web Services) data center. Lower step-in cost.
BASE SOFTWARE	Your IT staff is responsible for operating systems (OS) updates, anti-virus protection, etc.	Maintenance, OS updates, MS Defender are included.
ECO3 SOFTWARE	Installed, configured, and maintained by ECO3 specialists.	
SOFTWARE SUPPORT	Remote support within business hours/days is included in monthly fee. Optional on-site or 24/7 support.	Remote support within business hours/days is included in monthly fee. Optional on-site or 24/7 support. System monitoring to maximize availability.
SECURITY & PRIVACY	You need to implement a policy that meets your needs and local regulations.	Handled by AWS, in accordance with local privacy regulations such as GDPR or CCPA.
BACKUP POLICY	You need to define and apply a backup policy.	Back-up and restore are handled by ECO3.
BANDWIDTH	Fast communication on local network, but performance towards print buyers depends on your infrastructure.	AWS datacenters offer excellent and reliable bandwidth to you and your print buyers to offer a flawless user experience.
MULTI-SITE SUPPORT	Requires multiple licenses.	Easier to implement.

Unlocking opportunities through connectivity

In recent years, few technological innovations have caught as much attention as the Internet of Things (IoT). With the potential to cause a great shift for the printing industry, the IoT uses sensors, analytics, and machine learning to predict maintenance needs. As a consequence, ECO3 can offer precisely tailored services that can substantially reduce downtime for printers.

Using the internet, ECO3 can remotely monitor CtP systems, clean-out units and plate processors. The data collected are analyzed to uncover patterns, predict maintenance needs, or improve system efficiencies. This helps to anticipate and solve potential problems before they can disrupt print operations, either now or in the future. By enabling proactive decision-making, IoT ensures printing companies maintain operational efficiencies, save on costs and reduce unwanted waste.



"The decision in favor of the ECO3 product range was quite simple. We wanted to have a single supplier and contact for ordering goods and dealing with support and service issues."

"Our years of cooperation speak for themselves. We enjoy working with ECO3."

SVEN REGEN (Managing Director) & SEBASTIAN PREISSLER (Operations Manager) | PIEREG DRUCKCENTER BERLIN – GERMANY

YOU PRINT. WE CARE.

INTERFACE

Our monthly email newsletter keeps you up-to-date about ECO3 news, product announcements, and upcoming events for the graphic industry. Scan the QR code to subscribe.

