



AVALON 8-UP THERMAL PLATESETTERS

From entry-level to high-end engines – the Avalon series of platesetters has a best-in class solution in store for every need.

ECO3's Avalon 8-up series of platesetters caters to commercial and packaging offset printers – large, medium and small. Whether you need an entry-level engine for day-to-day excellence, a mid-sized system for higher productivity, or a top-of-the-range performer for maximum capability, there is a perfect solution for you. With an enviable reputation for solid dependability, these B1-sized computer-to-plate (CtP) systems prove themselves by delivering high quality, reliable consistency, and outstanding productivity for printing success.

**YOU
PRINT.
WE
CARE.**



Avalon 8-up thermal platesetters

Affordable excellence. Elevated productivity. Exceptional performance.

As an integral part of ECO3's total solution approach, the Avalon 8-up series of thermal platesetters delivers quality, productivity and advanced technology for print operations of all sizes.

Industry-leading productivity

Avalon 8-up platesetters are capable of addressing the needs of large, medium and small-volume printers. Combine the top-of-the-range Avalon N8-90XT with the Adamas chem-free plate to reach a throughput speed of 70 plates per hour (pph) or integrate a mid-range N8-30 or entry-level E8-30 series machine with our newest process-free plate for effortless printing. To future-proof your business, most Avalon platesetters are also upgradable, designed to evolve with your growing requirements.

Sublime imaging quality

All Avalon 8-up engines offer consistent, exceptional imaging quality to guarantee their trademark excellence. The high-end N8-90 series achieves an impressive image resolution of up to 340 lpi Sublima, while the entry-level E8-30 engines comfortably wins its class by reaching up to 240 lpi Sublima.

Increased automation excellence

Enhance your productivity further with ECO3's Robotic Plate Loader, giving you a sustainable competitive advantage with full prepress automation. This custom-made loading solution removes the need for human intervention, giving you weeks of uninterrupted production.

Tailored to your needs

The Avalon 8-up series features entry-level and mid-range engines as well as high-performance platesetters that are compatible with all ECO3 plate technologies. Quality, productivity and advanced technology are a given. With three entry-level models, two mid-range platesetters, and three high-performance engines, the choice is yours. Simply select the throughput speed and the automation options you need to start boosting your business and capture new opportunities to grow.

Avalon 8-up entry-level Affordable excellence

Relying on proven fiber-coupled laser technology, the entry-level Avalon E8-30E, E8-30S and E8-30XT platesetters deliver superior imaging quality up to 240 lpi Sublima, at a competitive throughput speed of up to 28 pph. With the most compact footprint on the market, the Avalon E8-30 series can be acquired as a standalone unit and then upgraded at any time with a press punching system and single or multi-cassette autoloader.

Avalon 8-up mid-range Elevated productivity

Based on the performance of Avalon high-end platesetters, the mid-range N8-30S and N8-30XT models take imaging quality and productivity to the next level, with up to 280 lpi Sublima and speeds of up to 32 plates per hour. Leveraging state-of-the-art fiber-coupled laser technology, they will help your business stand out from the competition. Choose between single, multi-cassette or pallet loader for seamless operation.

Avalon 8-up high-end Exceptional performance

At the top level, the Avalon 8-up engines N8-90E, N8-90S and N8-90XT come equipped with the latest generation GLV (grating light valve) imaging technology, resulting in a maximum throughput speed of 70 pph. The internal airflow design reduces the risk of imaging head contamination, which guarantees optimal quality of up to 340 lpi Sublima while reducing maintenance frequency. N8-90 platesetters are also green performers, consuming up to 88% less energy in standby mode compared to the previous generation.

The N8-90 series is upgradable with multiple automation options that eliminate manual steps, dramatically reducing make-ready time, including ECO3's Expert Loader or custom-made Robotic Plate Loader for full automation. Add press punch blocks to ensure accurate punching so plates can be loaded straight onto the press.

The Avalon 8-up series in a nutshell

- External drum thermal platesetters
- Consistent performance and high image quality
- Impressive throughput speed of up to 70 pph
- Automated plate loading with cassette, pallet, or robot
- Seamless integration with Apogee and Amfortis workflows
- Upgradeable to match expanding production requirements



Expert Loader

Most Avalon 8-up platesetters can be enhanced with a single or multi-cassette autoloader for higher automation and increased productivity. For the Avalon N8-30 and the high-end Avalon N8-90 platesetters, there is also a second option: the Expert Loader. This compact 8-up pallet loader is available in two models – the Expert Loader Fix and the Expert Loader Var.

EXPERT LOADER FIX	EXPERT LOADER VAR
<ul style="list-style-type: none">• Room for one pallet (1,200 plates)• Plates: 740 x 605 to 1165 x 950 mm (gauge 0.24-0.4 mm)• 2 predefined plate sizes• Optional addition of 1 cassette (100 extra plates)	<ul style="list-style-type: none">• Room for one pallet (1,200 plates)• Plates: 740 x 605 to 1165 x 950 mm (gauge 0.24-0.4 mm)• Automatic plate size detection• Optional addition of 1 or 2 cassettes• Optional extension unit (for a second pallet)

Full prepress automation

Let the Expert Loader do the heavy work! Outputting up to 70 plates per hour and offering up to 1,500 plates of uninterrupted loading, this pallet loader boosts process efficiency while eliminating the risk of plate damage.

Plates are safely loaded from the emulsion side using suction cups, while double-sheet detection reduces errors and unnecessary interruptions. Interleaves are automatically removed and collected in a large waste bin.

For added flexibility, two additional cassettes can be incorporated as an option, each accommodating 100 plates. For those with the most rigorous productivity requirements, an extension unit is available with an extra pallet adding another 1,500 plates of capacity.

Convenience is key

Trust the Expert Loader to load the plates directly from the pallet to the CtP engine. The only intervention required is to drive in the pallet through the accessible loading gate on the left or right where laser lines indicate the correct position. Then simply use the intuitive touch panel to control the plate production.



Plate Loading Robot

Integrating robotics for maximum efficiency

One of the key advantages of embracing robotics in plate loading automation is the tremendous impact on productivity. With the ability to match the maximum throughput of any commercial CtP and facilitate hours of uninterrupted production, ECO3's Robotic Plate Loader significantly boosts output. The incorporation of robotics also enables seamless integration of new plate formats, providing maximum flexibility for diverse printing requirements.

Versatility and sustainability

The Robotic Plate Loader is custom-built to fit your exact needs. Even better, it is capable of feeding two plate production lines simultaneously, at an hourly speed of up to 80 printing plates irrespective of size. This set-up is especially convenient for printers that need to handle multiple plate sizes (up to five).

Saving time and space, the Robotic Plate Loader automates multiple manual, repetitive tasks, such as loading plate cassettes used in autoloaders or fixing pallets on the base frame of skid loaders. In fact, this robot replaces up to two autoloaders and two skid loaders, improving working conditions for operators as well as reducing the overall equipment footprint by at least 20 to 30%.

Selecting a robotics solution also enables the use of highly efficient plate packaging concepts, which, in turn, minimizes waste and promotes environmental sustainability. Naturally the Robotic Plate Loader is fully integrated with ECO3's Apogee and Amfortis workflow software, providing optimal ease of use for any print operation.



The ultimate productivity boost



Printing plates are stacked emulsion side down on a pallet. Sensors detect the height and position of the stack. The front of the picking arm lifts up the plate.



The picking arm turns 180° to pick up the interleaf with the other side.



The arm moves to the waste bin and drops off the interleaves.



The plate is delivered to the transfer table...



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



All movements are displayed on the interactive GUI, which sends out warnings when the pallets need restocking or the waste bin is full.

Specifications

MODEL	N8-30 S	N8-30 XT	N8-90 E	N8-90 S	N8-90 XT
Imaging technology	64-channel fiber-coupled	96-channel fiber-coupled	GLV 512 beams	GLV 512 beams	GLV 1024 beams
Laser type	830 nm thermal laser diodes	830 nm thermal laser diodes	830 nm thermal laser diodes	830 nm thermal laser diodes	830 nm thermal laser diodes
Recording system	External drum	External drum	External drum	External drum	External drum
Press punch	optional, max 4 sets	optional, max 4 sets	optional, max 6 sets	optional, max 6 sets	optional, max 6 sets
RESOLUTION					
1200 dpi	yes	yes	yes	yes	yes
2400 dpi	yes	yes	yes	yes	yes
2540 dpi	yes	yes	yes	yes	yes
4000 dpi	n/a	n/a	factory option	factory option	n/a
4800 dpi	n/a	n/a	factory option	factory option	n/a
THROUGHPUT					
Throughput pph 1030 x 800 mm, 2400 dpi Energy Elite Eco	24	32	36	48	70
PLATE LOADING & UNLOADING CONFIGURATION					
Manual loading	yes (feed tray mandatory)	yes (feed tray mandatory)	yes	yes	yes
Automatic (autoloader)	yes	yes	yes	yes	yes
Pallet loader	yes	yes	yes	yes	yes
Robotic loading	n/a	n/a	yes	yes	yes
Manual unloading	yes	yes	yes	yes	yes
In line unloading	yes	yes	yes	yes	yes
PLATE CHARACTERISTICS					
Min. plate size (along drum x around drum) <small>*optional with punch connection kit **optional without punch connection kit</small>	650 mm x 370 mm (25.5" x 14.6") 304 mm x 370 mm (11.9" x 14.6") * 324 mm x 370 mm (12.8" x 14.6") **	650 mm x 370 mm (25.5" x 14.6") 304 mm x 370 mm (11.9" x 14.6") * 324 mm x 370 mm (12.8" x 14.6") **	304 mm x 293 mm (11.9" x 11.5")	304 mm x 293 mm (11.9" x 11.5")	304 mm x 293 mm (11.9" x 11.5")
Max. plate size (along drum x around drum) <small>*optional with punch connection kit **optional without punch connection kit</small>	1160 mm x 940 mm (45.6" x 37.0") *1150 mm x 940 mm (45.3" x 37.0")	1160 mm x 940 mm (45.6" x 37.0") *1150 mm x 940 mm (45.3" x 37.0")	1165 mm x 938 mm (45.9" x 36.9")	1165 mm x 938 mm (45.9" x 36.9")	1165 mm x 938 mm (45.9" x 36.9")
Thickness	0.15 mm-0.3 mm (6-12 mil, options for 0.4 mm support available)	0.15 mm-0.3 mm (6-12 mil, options for 0.4 mm support available)	0.15 mm-0.3 mm (6-12 mil, options for 0.4 mm support available)	0.15 mm-0.3 mm (6-12 mil, options for 0.4 mm support available)	0.15 mm-0.3 mm (6-12 mil, options for 0.4 mm support available)
Max. exposure size (along drum x around drum) <small>*with punch connection kit (When 8 mm clamp is set, the maximum drum rotation speed will be limited to 600rpm. When the '8mm clamp' option is not installed, the leading edge clamp is 12mm and tail edge clamp is 12 or 8mm)</small>	1160 mm x 924 mm (45.6" x 36.4") (grip 8/8 mm)*	1160 mm x 924 mm (45.6" x 36.4") (grip 8/8 mm)*	1165 mm x 938 mm (45.9" x 36.9") (grip 6/6mm)	1165 mm x 938 mm (45.9" x 36.9") (grip 6/6mm)	1165 mm x 938 mm (45.9" x 36.9") (grip 6/6mm)
Dimensions					
Weight	1260 kg (2778 lb)	1260 kg (2778 lb)	1115 kg (2453 lb)	1115 kg (2453 lb)	1115 kg (2453 lb)
Size (w x d x h)	2530 x 1495 x 1280 mm (99.6" x 58.9" x 50.4")	2530 x 1495 x 1280 mm (99.6" x 58.9" x 50.4")	2640 mm x 1475 mm x 1394 mm (103.9" x 58.1" x 54.9")	2640 mm x 1475 mm x 1394 mm (103.9" x 58.1" x 54.9")	2640 mm x 1475 mm x 1394 mm (103.9" x 58.1" x 54.9")
Environment (CtP and autoloader)					
Temperature range	Recommended: 21-25 °C	Recommended: 21-25 °C	Recommended: 21-25 °C	Recommended: 21-25 °C	Recommended: 21-25 °C
Humidity range	40-70 % RH (no condensation)	40-70 % RH (no condensation)	40-70 % RH (no condensation)	40-70 % RH (no condensation)	40-70 % RH (no condensation)
Power	Single-phase 220-240V, 32A	Single-phase 220-240V, 32A	Single-phase 200-240V, 30A	Single-phase 200-240V, 30A	Single-phase 200-240V, 30A

PLATE LOADING AUTOMATION	N8-AL S (FOR N8-30 S, N8-30 XT AND N8-90 E, N8-90 S & N8-90 XT)	N8-AL M (FOR N8-30 S, N8-30 XT AND N8-90 E, N8-90 S & N8-90 XT)	EXPERT LOADER (FOR N8-90 E, N8-90 S & N8-90 XT)
Plate capacity	100 plates (0.15 mm - 0.3 mm)	100 plates (0.15 mm - 0.3 mm) 75 plates (0.4 mm)	Pallet: 1500 plates (0.3 mm - 0.4 mm) Cassette: 100 plates (0.15 mm - 0.4 mm)
Number of cassettes	1	3 (upgrade to 5)	1 or 2
Min./max. plate size	1165 mm x 940 mm (45.9" x 37.0") / 304 mm x 370 mm (11.9" x 14.6")	1165 mm x 940 mm (45.9" x 37.0") / 304 mm x 370 mm (11.9" x 14.6")	740 mm x 605 mm (29.1" x 23.8") (500 mm x 400 mm (19.7" x 15.7") / 1165 mm x 950 mm (45.9" x 37.4") *cassette
Weight	600 kg (1323 lb)	1160 kg (2557 lb) 5 cassettes 1088 kg (2381 lb)3 cassettes	750 kg (1654 lb)
Size (w x d x h)	1827 mm x 2351 mm x 1530 mm (71,9" x 91,1" x 60,2")	3345 mm x 2351 mm x 1530 mm (131,7" x 91,1" x 60,2")	2930 mm x 1850 mm x 1550 mm (* 2395 mm) (115.4" x 72.8" x 61.0" (* 94.3"))

Robotic Plate Loader

The Robotic Plate Loader is custom-built for your specific requirements. These are examples of possible configurations.



MODEL	E8-30 E	E8-30 S	E8-30 XT
Imaging technology	32-channel fiber-coupled	48-channel fiber-coupled	64-channel fiber-coupled
Laser type	830 nm thermal laser diodes	830 nm thermal laser diodes	830 nm thermal laser diodes
Recording system	External drum	External drum	External drum
Press punch	optional, max 4 sets	optional, max 4 sets	optional, max 4 sets
RESOLUTION			
1200 dpi	n/a	n/a	
2400 dpi	yes	yes	
2540 dpi	n/a	n/a	
4000 dpi	n/a	n/a	
4800 dpi	n/a	n/a	
THROUGHPUT			
Throughput pph 1030 x 800 mm, 2400 dpi Energy Elite Eco	16	22	28
PLATE LOADING & UNLOADING CONFIGURATION			
Manual loading	yes	yes	yes
Automatic (autoloader)	yes	yes	yes
Pallet loader	n/a	n/a	n/a
Robotic loading	n/a	n/a	n/a
Manual unloading	yes	yes	yes
In line unloading	yes	yes	yes
PLATE CHARACTERISTICS			
Min. plate size (along drum x around drum) * optional with punch connection kit ** optional without punch connection kit	400 mm x 300 mm (15.7" x 11.8")	400 mm x 300 mm (15.7" x 11.8")	400 mm x 300 mm (15.7" x 11.8")
Max. plate size (along drum x around drum) * optional with punch connection kit ** optional without punch connection kit	1163 mm x 940 mm (45.7" x 37.0")	1164 mm x 940 mm (45.7" x 37.0")	1165 mm x 940 mm (45.7" x 37.0")
Thickness	0.15 mm-0.3 mm (6-12 mil)	0.15 mm-0.3 mm (6-12 mil)	0.15 mm-0.3 mm (6-12 mil)
Max. exposure size (along drum x around drum) * with punch connection kit (When 8 mm clamp is set, the maximum drum rotation speed will be limited to 600rpm. When the '8mm clamp' option is not installed, the leading edge clamp is 12mm and tail edge clamp is 12 or 8mm)	1163 mm x 924 mm (45.7" x 36.4") (grip 8/8 mm)	1163 mm x 924 mm (45.7" x 36.4") (grip 8/8 mm)	1163 mm x 924 mm (45.7" x 36.4") (grip 8/8 mm)
Dimensions			
Weight	1,100 kg (2425 lb)	1,100 kg (2425 lb)	1,100 kg (2425 lb)
Size (w x d x h)	2510 x 1900 x 1356 mm (98.8" x 74.8" x 53.7")	2510 x 1900 x 1356 mm (98.8" x 74.8" x 53.7")	2510 x 1900 x 1356 mm (98.8" x 74.8" x 53.7")
Environment (CtP and autoloader)			
Temperature range	Recommended: 21-25 °C	Recommended: 21-25 °C	Recommended: 21-25 °C
Humidity range	40-70 % RH (no condensation)	40-70 % RH (no condensation)	40-70 % RH (no condensation)
Power	Single-phase 220V, 2.5kW	Single-phase 220V, 2.6kW	Single-phase 220V, 2.7kW

PLATE LOADING AUTOMATION	E8-AL S (FOR E8-30 E, E8-30 S, E8-30 XT)	E8-AL M (FOR E8-30 E, E8-30 S, E8-30 XT)
Plate capacity	100 plates (0.15 mm - 0.3 mm)	400 plates (0.15 mm - 0.3 mm)
Number of cassettes	1	4
Min./max. plate size	1163 mm x 940 mm (45.7" x 37.0") / 400 mm x 300 mm (15.7" x 11.8")	1164 mm x 940 mm (45.7" x 37.0") / 400 mm x 300 mm (15.7" x 11.8")
Weight	150 kg (331 lb)	550 kg (1212 lb)
Size (w x d x h) (* open hood)	1339 mm x 762 mm x 946 mm (52.7" x 32.2" x 37")	1722 mm x 1120 mm x 1072 mm (67.7" x 44.1" x 42.2")



ECO3 at your service!

ECO3 goes beyond offering best-in-class CtP engines – choosing our products and services means choosing a streamlined production process where all components are perfectly aligned and synchronized. And, of course, we will offer you all the support and guidance you need along the way.

With a Total Solution Approach, we are committed to continuous innovation in product and service and focus on three times ECO: Ecology, Economy, and Extra Convenience – that's ECO3.



ECOLOGY

- Lower CO2 footprint,
greener production
- Minimize use of chemicals
- Eliminate water consumption
- Reduce ink consumption



ECONOMY

- Reduce labor cost
- Focus on automation
- Drying and/or
turnaround improvement



EXTRA CONVENIENT

- Easy-to-operate solutions
- Matched component approach
- Remote and local service & support
- Peace of mind

ECO3.com

ECO3 is committed to continuous innovation that targets ecology, economy and extra convenience. Our solutions are designed to deliver higher productivity, lower costs and greener outcomes.