



# AVALON N VLF

## 16-UP TO 40-UP PLATESETTERS

Avalon N VLF (Very Large Format) computer-to-plate engines are star performers in efficiency- and quality-driven plate production – perfect for growing your commercial or packaging printing business.

Covering formats from 16-up to 40-up, they combine high-speed thermal imaging with ECO3's automation options to help you grow volumes, shorten make-ready times, and maintain consistent quality across all presses

ECO3 offers the Avalon N systems as part of a complete solution, including offset plates, Apogee or Amfortis workflow software, screening technologies and support contracts.

YOU  
PRINT.  
WE  
CARE.



# Avalon N VLF thermal platesetters

Big benefits. Big results. Real productivity.

Unlock the full potential of your commercial printing business with the Avalon N VLF (Very Large Format) computer-to-plate engines. Handling plates of up to 2280 x 1600 mm and achieving a maximum throughput speed of 70 B1 plates per hour, these thermal platesetters are unique among their kind and prove themselves in terms of productivity and flexibility. 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.

## Sublime imaging quality

At the heart of every Avalon N VLF is GLV (Grating Light Valve) imaging technology. It delivers a stable, sharply de-

finer dot and guarantees uniformity from plate to plate and job to job, even at high throughput.

## Industry-leading productivity

Thanks to their advanced GLV technology, Avalon N VLF engines offer best-in-class productivity and throughput speed, while delivering premium-quality results. For those who need an extra-powerful productivity boost, there is a press punching system available for Avalon VLF engines, significantly shortening make-ready time. Add the necessary punching blocks for your different presses and get ready to speed things up. More productivity-increasing options include dual plate loading and twin imaging, depending on the model.

### Avalon VLF in a nutshell :

- VLF external drum thermal platesetters featuring proven technology and consistent output quality with imaging resolutions up to 340 lpi Sublima.
- Throughput speed of up to 70 B1 plates per hour, depending on model, plate type and plate size.
- Upgradable engines featuring press punching and exceptional registration accuracy.
- Multiple automation options, such as a multi-cassette loader, a skid loader and plate loading using robotics.
- Integration with ECO3's Apogee and Amfortis prepress workflow solutions for commercial and packaging printers.

# Select a system tailored to your needs

Avalon N VLF platesetters are available in three sizes. The largest model can even image two plates simultaneously.

- Avalon N16-90 CTP's supports plates sizes up to 1,470 by 1,180 mm or 57.9 by 46.5 inches.
- Avalon N24-90 engines can image plates sizes up to 1,652 by 1,325 mm or 65.0 by 52.2 inches.
- Avalon N40-90 systems handle plates sizes up to 2,280 by 1,600 mm or 89.7 by 62.9 inches.

All three engines are available in versions with different throughput speeds and different levels of automation. This enables you to pick the engine that best suits your needs.



Avalon N16-90



Avalon N24-90  
with pallet loader

## ECO3, your VLF expert

Boasting years of experience in very large format printing, ECO3 is the ideal partner to help you accomplish advanced process efficiency and automation, as well as cost control, in your prepress department.

ECO3 builds solutions around ECOlogy, ECONomy and Extra Convenience. We develop integrated solutions – consisting of hardware, consumables, software and services – that streamline your prepress and printing operations and make them cleaner, more cost-effective and easier to operate. All while guaranteeing superior and consistent print quality. The result? More value for your entire business!

Choosing ECO3 is choosing a partner, not just a machine. ECO3 goes beyond offering best-in-class CtP engines – choosing our products and services means choosing



innovation, industry-leading quality and a streamlined production process in which all components are perfectly aligned and synchronized with one another. And, of course, we gladly offer you support and guidance where needed.

# Boosting your business

Productivity, quality and advanced technology are a given with the Avalon N VLF series. Simply select the engine that suits your needs in terms of plate size, throughput speed and features, and start boosting your business. All engines can be upgraded with a multi-cassette loader, while most can be equipped with a pallet loader too. And if you want to take prepress to the next level, there is even a fully robotic loading option.

## Plate loading automation using robotics

To streamline prepress workflow and boost productivity, the Avalon N VLF platesetters can be automatically loaded by a robotic plate loader. It is custom-built according to your exact needs and can simultaneously feed two plate production lines with a speed of up to 80 printing plates per hour, independent of plate size. The set-up is especially convenient if you need to handle multiple plate sizes (up to five). The robotic plate loader automates otherwise manual, repetitive tasks such as plate loading cassettes

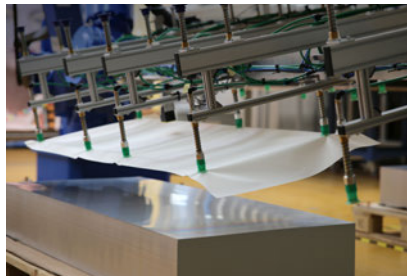


of autoloaders, or fixing pallets on the base frame of skid loaders. It replaces up to two autoloaders and two skid loaders, reducing the footprint by at least 20 to 30%. The robotic plate loader is fully integrated with ECO3's Apogee and Amfortis workflow software, providing optimal ease of use

## Let the robot do the heavy lifting



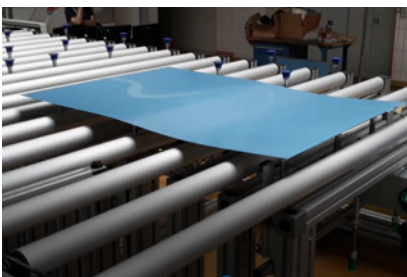
The printing plates are stacked emulsion down on a pallet. Sensors detect the stack's height and position. The front side of the picking arm takes up the plates.



The picking arm turns 180° to pick up the interleaf with its backside.



The interleaves are picked up and disposed flat in a bin.



The plate is delivered to the transfer table...



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



The interactive GUI makes it possible to follow up the robot's movements, and sends out warnings when it is time to restack pallets or empty the interleaf bin.

# Avalon N16 specifications

MODELS	N16-90 E	N16-90 S	N16-90 XT
Imaging technology	GLV 512 beams		GLV 1024 beams
Laser type	830 nm thermal laser diodes		
Recording system	External drum		
Dual loading	Not available		
Twin imager	Not available		
Press punch	Optional, max 3 sets		
Resolutions	1,200, 2,400 & 2,540 dpi		
<b>PLATE LOADING &amp; UNLOADING CONFIGURATION</b>			
Manual loading	Yes		
Semi-manual loading	Not available		
Automatic loading (autoloader)	Yes		
Pallet loader	Yes		
Manual unloading	Yes		
In line unloading	Yes		
Robotic loading	Optional		
<b>THROUGHPUT</b>			
1,030 mm (40.5") wide plates	20 plates per hour	37 plates per hour	46 plates per hour
1,448 mm (57") wide plates	17 plates per hour	29 plates per hour	42 plates per hour
<b>PLATE CHARACTERISTICS</b>			
Max. plate size <sup>1</sup>	1,470 x 1,180 mm (57.9 x 46.5")		
Min. plate size <sup>2</sup>	650 mm x 550 mm (25.6" x 21.7") *optional plate width between 570 mm and 624 mm cannot be used (size limitation)		
Thickness <sup>3</sup>	0.2 -0.4 mm (8-16 mil)		
Max. exposure size <sup>4</sup>	1,470 x 1,169 mm (57.9 x 46.0")		
<b>AUTOLOADERS</b>			
N16-90 AL-M (Triple L, R, L/R)	Optional		
Pallet loader	Optional		
Robot plate loader	Optional		
<b>ENVIRONMENT (CTP AND AUTOLOADER)</b>			
Temperature range	Recommended: 21-25 °C		
Humidity range	50-70 % RH (no condensation)		
Power	Single-phase 200-240V, 25A		

<sup>1</sup> (along drum x around drum)

<sup>2</sup> (along drum x around drum)

<sup>3</sup> 0.15 mm thickness can be used only for the optional min. size of 450 mm x 370 mm

<sup>4</sup> (along drum x around drum) with registration punches - leading edge grip: 8 mm; trailing edge grip: 7 mm  
- without registration punches Leading edge grip: 5 mm; Trailing edge grip: 7 mm

AUTOLOADERS	N16-90 AL-M (Triple L, R, L/R)	N16-90 PALLET LOADER
Plate capacity	0.3 mm: 75 plates per cassette 0.4 mm: 60 plates per cassette	600 plates
Number of cassettes	3 (upgradeable to 6)	Not available
Max. plate size	1,470 x 1,180 mm (57.8 x 46.4")	1,652 x 1,325 mm (65 x 52.2")
Min. plate size	650 x 550 mm (25.6 x 21.7")	1,000 x 750 mm (39.4 x 29.5")
Weight	3 cassettes: 1,140 kg (2,513 lb) 6 cassettes: 1,650 kg (3,637 lb)	800 kg (5,732 lb)
Dimension (w x d x h)	3,150 x 3,215 x 1,715 mm (124 x 126.6 x 67.5")	2,725 x 1,935 x 1,760 mm (107.3 x 76.2 x 69.3") without bridge on interleaf box

## ROBOTIC PLATE LOADER

This system is tailor-built to your needs; please contact your ECO3 team or dealer for guidance.

# Avalon N24 & N40 specifications

MODELS	N24-90 S	N24-90 XT	N40-90 S	N40-90 XT
Imaging technology	GLV 512 beams	GLV 1024 beams	GLV 1024 beams	
Laser type	830 nm thermal laser diodes		830 nm thermal laser diodes	
Recording system	External drum		External drum	
Dual loading	Not available		Yes	
Twin imager	Not available		Yes	
Press punch	Optional, max 6 sets		Optional, max 5 sets	
Resolutions	1,200, 2,400 & 2,540 dpi		1,200, 2,400 & 2,540 dpi	
<b>PLATE LOADING &amp; UNLOADING CONFIGURATION</b>				
Manual & semi-manual loading	Yes		Yes	
Automatic loading (autoloader)	Yes		Yes	
Manual & in line unloading	Yes		Yes	
Robotic loader	Optional		Optional	
<b>THROUGHPUT</b>				
1,030 mm (40.5") wide plates	34 plates per hour	46 plates per hour	46 plates per hour	70 plates per hour
1,448 mm (57") wide plates	27 plates per hour	39 plates per hour		
2,280 mm (89.7") wide plates			24 plates per hour	34 plates per hour
<b>PLATE CHARACTERISTICS</b>				
Max. plate size <sup>1</sup>	1,652 x 1,325 mm (65.0 x 52.2")		2,280 x 1,600 mm (89.7 x 62.9") 1,060 x 1,600 mm (41.7 x 63")*	
Min. plate size <sup>2</sup>	650 x 490 mm (25.6 x 19.3")		1,061 x 550 mm (41.8 x 21.7") 650 x 550 mm (25.6 x 21.7") *	
Thickness	0.2 - 0.4 mm (8 - 16 mil)* *0.4 mm (16 mil) is only available for sizes over 900 x		0.2 - 0.4 mm (8 - 16 mil) 0.5 mm (20 mil) optional	
Max. exposure size <sup>3</sup>	1,652 x 1,313 mm (65 x 51.7")		2,280 x 1,588 mm (89.7 x 62.5")	
<b>AUTOLOADERS</b>				
N24-90 / N40-90 AL-M (L,R)	Optional <sup>4</sup>		Optional	
PALLET LOADER	Optional		Optional	
Robotic plate loader	Optional		Optional	
<b>ENVIRONMENT (CTP AND AUTOLOADER)</b>				
Temperature range	Recommended: 21-25 °C		Recommended: 21-25 °C	
Humidity range	50-70 % RH (no condensation)		50-70 % RH (no condensation)	
Power	Single-phase 200-240V, 25A		Single-phase 200-240V, 30A	

1 (along drum x around drum) \* dual loading

2 (along drum x around drum) \* dual loading

3 (along drum x around drum) with registration punches - leading edge grip: 8 mm; trailing edge grip: 7 mm) - without registration punches Leading edge grip: 5 mm; Trailing edge grip: 7 mm

4 requires connection kit

AUTOLOADERS	N24-90 / N40-90 AL-M (L,R)	N24 PALLET LOADER	N40 PALLET LOADER
Plate capacity	0.3 mm: 75 plates per cassette 0.4 mm: 60 plates per cassette	0.3 mm: 600 plates	0.3 mm: 600 plates
Number of cassettes	4	Not available	Not available
Max. plate size	2,280 x 1,600 mm (89.7 x 62.9")	1,652 x 1,325 mm (65 x 52.2")	2,280 x 1,560 mm (89.7 x 61.4")
Min. plate size	650 x 550 mm (25.6 x 21.7")	1,000 x 750 mm (39.4 x 29.5")	800 x 550 mm (31.5 x 21.7")
Weight	2,600 kg (5732 lb)	800 kg (1,764 lb)	1,750 kg (3,858 lb)
Dimension (w x d x h)	3,365 x 4,120 x 1,850 mm (132.4 x 162.2 x 72.8")	2,725 x 1,935 x 1,760 mm (107.5 x 76.2 x 69.3")	3,415 x 2,120 x 2,075 mm (134.5 x 83.5 x 81.7")

**ROBOTIC PLATE LOADER** This system is tailor-built to your needs; please contact your ECO3 team or dealer for guidance.

**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.