AVALON VLF THERMAL PLATESETTERS

Avalon VLF (Very Large Format) computer-to-plate engines are star performers in efficiency- and quality-driven plate production – perfect for growing your commercial printing business. They will handle any plate size from 16- to 48-up.

AGFA

Avalon VLF thermal platesetters

Big benefits. Big results.

Unlock the full potential of your commercial printing business with the sustainable Avalon VLF (Very Large Format) computer-to-plate engines. Handling plates of up to 2900 x 1350 mm and achieving a maximum throughput speed of 70 B1 pph, these thermal platesetters are unique among their kind and prove themselves in terms of productivity and flexibility.

The Avalon 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.

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 pph, 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 Agfa's Apogee prepress workflow solution.

Industry-leading productivity

Thanks to their advanced GLV technology, Avalon VLF engines offer best-in-class productivity and throughput speed. Combine the Avalon N40-90 with the Energy Elite Eco printing plate, for example, to produce no fewer than 70 B1 plates per hour and still deliver 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.

On-line press punching

Agfa, your VLF expert

Productivity is of the utmost importance to large commercial printing companies that are under extreme time pressure. Boasting years of experience in very large format printing, Agfa is the ideal partner to help you accomplish advanced process efficiency and automation, as well as cost control, in your prepress department. We even offer a CtP engine that handles plates up to 2900 mm wide for the largest-sized presses – the Avalon VLF N48.

Premium imaging quality

Avalon platesetters yield consistent, first-rate imaging quality of up to 340 lpi Sublima. All models are equipped with GLV technology for precise imaging, exceptional tonal accuracy and uniformity from job to job. So, whether you opt for a mid- or full-size engine, expect Avalon's trademark excellence.

ECO³ – More value for your entire business

Agfa is committed to sustainable innovation focused on ecology, economy, and extra convenience – or ECO³. 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!

Agfa at your service

Agfa 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.

MODELS	N16-90 E	N16-90 S	N16-90 XT	N24-90 S	N24-90 XT
Imaging technology	GLV 512 beams		GLV 1024 beams	GLV 512 beams	GLV 1024 beams
Laser type	830 nm thermal laser diodes				
Recording system	External drum				
Dual loading	n/a				
Twin imager	n/a				
Press punch	optional, max 5 sets			optional, max 6 sets	
RESOLUTION					
1200 dpi	yes				
2400 dpi	yes				
2540 dpi	yes				
4000 dpi	n/a				
4800 dpi	n/a				
PLATE LOADING & UNLOADING CONFIGURATION					
Manual loading	yes				
Semi-manual loading	n/a			yes	
Automatic (autoloader)	yes				
Pallet loader	n/a			yes	
Manual unloading	yes				
In line unloading	yes				
THROUGHPUT					
Depending on plate width	1030 mm (40.5 in): 20 pph 1448 mm (57 in): 17 pph	1030 mm (40.5 in): 37 pph 1448 mm (57 in): 29 pph	1030 mm (40.5 in): 46 pph 1448 mm (57 in): 42 pph	1030 mm (40.5 in): 34 pph 1448 mm (57 in): 27 pph	1030 mm (40.5 in): 46 pph 1448 mm (57 in): 39 pph
PLATE CHARACTERISTICS					
Max. plate size[1]	1470 mm x 1180 mm (57.9″ x 46.5″)			1652 mm × 1325 mm (65.0″ x 52.2″)	
Min. plate size[2]	650 mm x 550 mm (25.6″ x 21.7″) 450 mm x 370 mm (17.7″ x 14.6″) *optional plate width between 570 mm and 624 mm cannot be used (size limitation)			650 mm x 490 mm (25.6″ x 19.3″)	
Thickness	0.2 mm-0.4 mm (8-16 mil) *0.15 mm thickness can be used only for the optional min. size of 450 mm x 370 mm; 0.4 mm thickness plates can only be used when they are larger than 1030 mm x 770 mm			0.2 mm - 0.4 mm (8 - 16 mil)* *0.4 mm (16 mil) is only available for plates larger than 900 mm x 770 mm	
Max. exposure size[3]	1470 mm x 1169 mm (57.9″ x 46.0″)			1652 mm × 1313 mm (65.0″ x 51.7″)	

AUTOLOADERS	N16-90 AL-M (Triple L, R, L/R)	N24-90 AL-SKID	N24-90 AL-M
Plate capacity	0.3 mm, 75 plates per cassette 0.4 mm, 60 plates per cassette	600 plates	0.3 mm, 75 plates per cassette 0.4 mm, 60 plates per cassette
Number of cassettes	3 (upgrade to 6)	n/a	4
Min./max. plate size	650 mm x 550 mm (25.6″ x 21.7″) / 1470 mm x 1180 mm (57.8″ x 46.4″)	1000 mm x 750 mm (39.4″ x 29.5″) / 1652 mm x 1325 mm (65.0″ x 52.2″)	500 mm x 550 mm (19.7″ x 21.7″) / 2280 mm x 1600 mm (89.7″ x 62.9″)
Weight	1150 kg (2514 lb)	800 kg (1764 lb)	2540 kg (5599 lb)
Dimension (w x d x h)	3150 mm x 3215 mm x 1715 mm (124.0″ x 126.6″ x 67.5″)	2725 mm x 1935 mm x 1760 mm (107.5″ x 76.2″ x 69.3″)	3365 mm x 4123 mm x 1850 mm (132.4″ x 162.3″ x 72.8″)

ENVIRONMENT (CTP AND AUTOLOADER)	
Temperature range	Recommended: 21-25 °C
Humidity range	40-70 % RH (no condensation)
Power	Single-phase 200-240V, 25A

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 registation punches Leading edge grip: 5 mm; Trailing edge grip: 7 mm

	N40-90 S	N40-90 XT
Imaging technology	GLV 1024 beams	
Laser type	830 nm thermal laser diodes	
Recording system	External drum	
Dual loading	yes	
Twin imager	n/a	
Press punch	optional, max 5 sets	
RESOLUTION		
1200 dpi	yes	
2400 dpi	yes	
2540 dpi	yes	
4000 dpi	n/a	
4800 dpi	n/a	
PLATE LOADING & UNLOADING CONFIGURATION		
Manual loading	yes	
Semi-manual loading	yes	
Automatic (autoloader)	yes	
Pallet loader	yes	
Manual unloading	yes	
In line unloading	yes	
THROUGHPUT		
Depending on plate width	1030 mm (40.5 in): 46 pph 2280 mm (89.7 in): 24 pph	1030 mm (40.5 in): 70 pph 2280 mm (89.7 in): 34 pph
PLATE CHARACTERISTICS		
Max. plate size[1]	2280 mm x 1600 mm (89.7″ x 62.9″) 1060 mm x 1600 mm (41.7″ x 63″)*	
Min. plate size[2]	1061 mm x 550 mm (41.8″ x 21.7″) 650 mm x 550 mm (25.6″ x 21.7″) *	
Thickness	0.2 mm - 0.4 mm (8 - 16 mil) 0.5 mm (20 mil) optional	
Max. exposure size[3]	2280 mm x 1588 mm (89.7″ x 62.5″)	
AUTOLOADERS	N40-90 AL-M (L,R)	N40-90 PALLET LOADER (L,R)
Plate capacity	0.3 mm, 75 plates per cassette 0.4 mm, 60 plates per cassette	600 plates
Number of cassettes	4	n/a
Min./max. plate size	650 mm x 550 mm (25.6″ x 21.7″) / 2280 mm x 1600 mm (89.7″ x 62.9″)	800 mm x 550 mm (31.5″ x 21.7″) / 2280 mm x 1560 mm (89.7″ x 61.4″)
Weight	2600 kg (5732 lb)	1750 kg (3858 lb)
Dimension (w x d x h)	3365 mm x 4120 mm x 1850 mm (132.4″ x 162.2″ x 72.8″)	3415 mm x 2120 mm x 2075 mm (134.5″ x 83.5″ x 81.7″)
ENVIRONMENT (CTP AND AUTOLOADER)		
Temperature range	Recommended: 21-25 °C	
Humidity range	40-70 % RH (no condensation)	
Power	Single-phase 200-240V, 10A	

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 registation punches Leading edge grip: 5 mm; Trailing edge grip: 7 mm

Boosting your business

Productivity, quality and advanced technology are a given with the Avalon 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 then there is a robotic plate loading option...

Plate loading automation using robotics

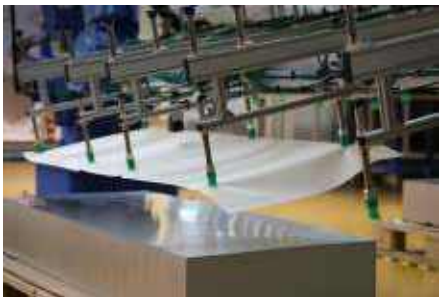
To streamline prepress workflow and boost productivity, the Avalon VLF platesetters can be automatically loaded by a robotic plate loader. It is custom-built according to your exact needs and can simultaneously feed two plate production lines with a speed of up to 80 printing plates per hour, independent 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 Agfa's Apogee and Amfortis workflow software, providing optimal ease of use.

Convenience is key

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.

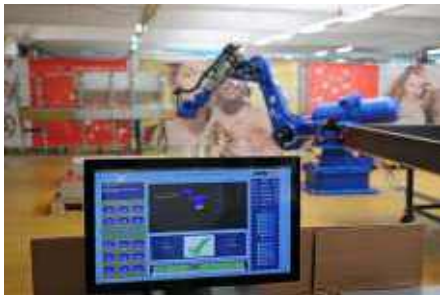


The picking arm turns 180° to pick up the interleaf with its backside.

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.

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