creating for tomorrow

Asahi
Photoproducts

PHOTOPOLYMERS & PROCESSING UNITS

AsahiKASEI

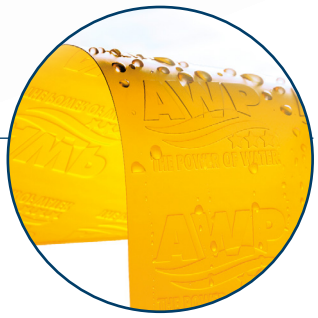
Asahi Photoproducts

Solid Photopolymers

AWP™

Aqueous Washable Plate

Developed for the next generation



AWP™ our latest development is a unique plate making technology and a beneficial alternative to other print processes.
The »Pinning Technology for Clean Transfer« provides a simple way to improve print quality.
High printing resolution, bright pictures and excellent press performance are a small selection of all the advantages you can get out of »Pinning Technology for Clean Transfer«
AWP™ will help you by saving time and money, reduce waste and assist in preserving precious energy resources.
The system enables the necessary control to consistently reproduce the finest image quality. Time after time after time.

The excellent ink transfer results in superlative ink coverage:

- Consistent Plate reproduction
- Predictable first stable dot- predictable first printing dot
- Usually 1/3 of solvent plate making process time
- Only 5 minutes drying required at low temperature (40°C)
- Good plate dimentions due to low temperature production process

	AWP™ - DEF and DEW	
Thickness / mm	1,14	1,70
Hardness / Shore A	77	70
K Factor	5,98	9,98
Resolution 175 lpi digital	1-98%	1-98%
Isolated line / µm	80	80
Isolated dot / µm	150	150
Recommended application	Label, Flexible Packaging, Film and Paper, application with solvent and water based ink	

The AWP™-DEF can be processed on a conventional exposure frame, the processing itself being made in a specifically designed aqueous washable processor from Asahi.
The plate is exposed on the back to produce the desired relief depth and achieve maximum sensitivity to UV light. After removal of the protective film, the plate is imaged by digital imager with a commonly available laser.
The Plate is then exposed, washed out, quickly dried, and finished by UVA and UVC to ensure the optimum properties of the print-ready plate.
AWP™-DEF plates are compatible with commonly used UV, solvent- and water-based ink systems.

AFP™ - TOP

The premium flexo plate

with » Pinning Technology for Clean Transfer «

Asahi's AFP™-TOP is a premium digital flexo plate giving the printer a wide colour space with vibrant colour reproductions and soft tonal shades fading out to zero.
Asahi's AFP™-TOP incorporates the »Pinning Technology for Clean Transfer«, which allows a kiss touch printing pressure setting with constant repeatability of printing quality during the production run. The »Pinning Technology« is also reducing the ink filling-in in the mid-tone area over the printing run leading to fewer cleaning intervals and press stop downtimes for the printer. Asahi's AFP™-TOP plate was developed for the high quality film printing application using solvent based inks with the objective of transferring printing jobs from other printing technologies to flexography. The Asahi's AFP™-TOP plate is a product solution, which can easily be fitted into existing customer environments without the need of additional machine investment. This flexibility enables the customer to react to changing market needs and keeping their business environment sustainable.
The Asahi's AFP™-TOP is compatible with many of the recent high definition screening and microcell patterning technologies.

The product advantages in detail:

- High resolution image and printing performance
- Finest and soft tonal gradation fading out to zero
- Wide printed colour gamut due to low dot gain and enhanced ink transfer
- » Pinning Technology for Clean Transfer « enabling a superior ink transfer
- High printing performance with solvent and water based ink on film or coated paper substrate
- Reduced ink filling-in in mid-tone printing leading to less press cleaning stops
- Kiss touch printing pressure setup giving increasing plate life time
- Consistent printing quality over the production run due to »Pinning Technology for Clean Transfer«
- System compatibility with recent screening and microcell technologies.

	AFP™ - TOP	
Thickness / mm	1,14	1,70
Hardness / Shore A	77	69
Resolution 175 lpi / 200 lpi	1-95%	1-95%
Isolated line / µm	80	80
Isolated dot / µm	150	150
Ink recommendation	Solvent and water based inks	
Application	Film and coated Paper	

The AFP™-TOP digital flexo plates can be produced in all Asahi AFP™ processing systems or corresponding processing equipment. The plate is exposed on the back to produce the desired relief depth and achieve maximum sensitivity to UV light. After removal of the protective film, the black mask layer is imaged by a laser. Commonly available laser types are YAG, diode or fibre laser. Then the plate is exposed, processed by a solvent wash process, dried and finished by UVA and UVC light to ensure the optimum properties of the print-ready plate.
AFP™-TOP plates feature excellent compatibility with commonly used solvent- and water- based ink systems on smooth film and coated paper substrates. After printing, the plates should be thoroughly cleaned. Direct exposure to sunlight and heat during storage is to be avoided.

AFP™ - TSP

The Premium flexo plate

with Pinning Technology for Clean Transfer

Asahi's AFP™-TSP is a medium hardness digital flexo plate, optimised for a wide range of printing materials. From absorbent paper substrates such as pre-printed liner, paper and carton board to non-absorbent film and label materials. Asahi's AFP™-TSP incorporates the »Pinning Technology for Clean Transfer« , which allows a kiss touch printing pressure setting with constant repeatability of printing quality during the production run. The »Pinning Technology for Clean Transfer« also reduces the ink infill in the mid-tone area during the length of the printing run, leading to fewer cleaning intervals and press stop downtimes for the printer.
Asahi's AFP™-TSP plate was developed to achieve a firm homogeneous ink density on printed lines and solids and staying clean and open over the printing run in halftone screens. The AFP™-TSP plate is the perfect combination for halftone and solid printing and is part of the same polymer family as the harder AFP™-TOP plate. By using AFP™-TOP; which is able to provide a fine, smooth gradation towards zero and combining it with the homogenous ink coverage of fine lines, bar codes and solids capable with AFP™-TSP, it is possible to transfer jobs to flexography from other technologies that deliver very challenging, high demanding quality.

The product advantages in detail:

- Combination plate for halftones and solids
- Homogeneous ink film printing in lines and solids
- »Pinning Technology for Clean Transfer« enabling a superior ink transfer
- High printing performance with solvent, water and most UV based ink on film and paper
- Strong plate abrasion resistance with good base film lamination strength
- High performance plate in aggressive printing condition
- Reduced ink infill in mid-tone printing leading to less press cleaning stops
- Kiss touch printing pressure setup giving increased plate longevity
- Consistent printing quality over the production run due to »Pinning Technology for Clean Transfer«
- System compatibility with recent screening and microcell technologies

	AFP™ - TSP			
Thickness / mm	1,14	1,70	2,54	2,84
Hardness / Shore A	69	58	49	48
Resolution 175 lpi	1-95%	1-95%	1-95%	1-95%
Isolated line / µm	80	80	80	80
Isolated dot / µm	150	150	150	150
Ink recommendation	Water based, Solvent based and most UV based ink			
Application	Paper-/Plastic Bags, Flexible Packaging, Preprint, Labels, Aluminium Foil, Flat Carton			

The AFP™-TSP digital flexo plates can be produced in all Asahi AFP™ processing systems or corresponding processing equipment. The plate is exposed on the back to produce the desired relief depth and achieve maximum sensitivity to UV light. After removal of the protective film, the black mask layer is imaged by a laser. Commonly available laser types are YAG, diode or fibre laser. Then the plate is exposed, processed by a solvent wash process, dried and finished by UVA and UVC light to ensure the optimum properties of the print-ready plate. AFP™-TSP plates feature excellent compatibility with commonly used solvent, water and most UV based ink systems on film and paper printing materials. After printing, the plates should be thoroughly cleaned. Direct exposure to sunlight and heat during storage is to be avoided.

AFP™ - SF/DSF

Solid Photopolymer

The AFP™-SF/DSF is Asahi's medium hard plate for good highlights combined with excellent ink transfer onto all substrates. Its optimized balance of solid ink density and highlight dot printing produces incomparably good ink coverage with low dot gain in the mid tones and brilliant highlights. This can be achieved at maximum printing speeds. The AFP™-SF/DSF plate can be used for most flexographic applications with particular suitability for flexible packaging printing on film and paper with solvent or water based inks. The ASAHI AFP™-SF/DSF elevates printing results to a new level of quality. The superb ink transfer and excellent resolution offer crucial advantages for quality-conscious printers.

The product advantages in detail:

- The excellent ink transfer results in superlative solid coverage.
- The printability is particularly suitable for substrates that meet the ever increasing packaging cost quality ratio expectations
- Superbly balanced reproduction of large tonal areas, text and halftone elements
- The wide exposure latitude enables consistent results
- Steep relief shoulders and very good intermediate depths allow reverse elements
- High ozone resistance facilitates plate storage
- The plate's high flexibility makes it possible to print with small-diameter cylinders
- The plate is the perfect choice for solvent and water ink printing applications were solid ink transfer in harmony with fine highlights dots is the focus.

	AFP™ - SF/DSF			
Thickness / mm	1,14	1,70	2,54	2,84
Hardness / Shore A	74	62	56	54
K factor	5,98	9,89	15,17	17,05
Resolution 150 lpi conventional	1-95%	1-95%	1-95%	1-95%
Resolution 175 lpi digital	1-95%	1-95%	1-95%	1-95%
Isolated line / µm	80	80	80	80
Isolated dot / µm	150	150	150	150

The AFP™-SF/DSF flexo plates can be produced in all Asahi AFP™ processing systems or corresponding processing equipment. The plate is exposed on the back to produce the desired relief depth and achieve maximum sensitivity to UV light. After removal of the protective film, the main exposure is carried out. When an AFP™-D(igital)SF type is used, the removal of the protective film is followed by laser imaging with a commonly available YAG, diode or fibre laser. Then the plate is exposed, dried and finished by UVC and UVA light to ensure the optimum properties of the print-ready plate. AFP™-SF/DSF plates feature excellent compatibility with commonly used solvent- and water-based ink systems.

AFP™ - SH/DSH

Solid Photopolymer

Asahi's AFP™-SH/DSH is a hard Flexo plate to satisfy the customers increased demands for excellent printing quality and high durability.
The improved mechanical stability and excellent ink transfer behavior in combination with low highlight dot gain, is making the SH/DSH plate most quality printers plate of choice. Steep relief shoulders and good intermediate depths ensure excellent printing results from the very start. The AFP™-SH/DSH is primarily used in printing flexible packaging and labels. It's real strength, however, shows above all with jobs involving difficult tasks to be solved depending which printing application may be required.

The product advantages in detail:

- Superbly balanced reproduction of large tonal areas, text and halftone elements on film, foil and coated surfaces
- Short platemaking times and easy handling serve to improve quality
- The excellent tonal range improves the printing results
- Very good resistance to UV inks
- The wide exposure latitude facilitates consistent results
- Steep shoulder relief and very good intermediate depths allow printing reverse elements
- High ozone resistance facilitates plate storage

	AFP™ - TSP			
Thickness / mm	1,14	1,70	2,54	2,84
Hardness / Shore A	77	69	63	63
K factor	5,98	9,89	15,17	17,05
Resolution 150 lpi conventional	1-95%	1-95%	1-95%	1-95%
Resolution 175 lpi digital	1-95%	1-95%	1-95%	1-95%
Isolated line / µm	80	80	80	80
Isolated dot / µm	150	150	150	150

The AFP™-SH/DSH flexo plates can be produced in all Asahi AFP™ processing systems or corresponding processing equipment. The plate is exposed on the back to produce the desired relief depth and achieve maximum sensitivity to UV light. After removal of the protective film, the main exposure is carried out. When an AFP™-D(igital)SH type is used, the removal of the protective film is followed by laser imaging with a commonly available YAG, diode or fibre laser. Then the plate is exposed, dried and finished by UVA and UVC light to ensure the optimum properties of the print-ready plate. AFP™-SH/DSH plates feature excellent compatibility with commonly used UV, solvent- and water-based ink systems. After printing, the plates should be thoroughly cleaned. Direct exposure to sunlight and heat during storage is to be avoided.

AFP™ - SE/DSE

Solid Photopolymer

The AFP™-SE/DSE Flexo plate satisfies the severest criteria of quality in printing corrugated board, solid board and heavy-duty bags. The surface unevenness of the printing material is compensated by the ideal shore hardness and the resilience characteristics of the AFP™-SE/DSE plate. The plate's dimensionally stable polyester base sheet compliments the printing quality achievable with the AFP™-SE/DSE. The wide exposure latitude of the AFP™-SE/DSE plate ensures that image elements like tones and isolated lines are optimally anchored even with a relief depth of 3 mm. At the same time, intermediate depths form evenly and the relief is produced with steep shoulders.

In platemaking and printing, the AFP™-SE/DSE plate can be relied on for:

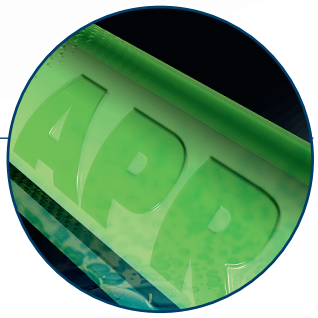
- Low dot gain printing
- Excellent ink transfer
- Optimized plate resilience to minimize the washboard effect
- Wide exposure latitude
- Optimized durability for high aggressive papers
- Large cleaning intervals
- Optimum intermediate depths
- Steep relief shoulders
- High flexibility
- High mechanical resistance

AFP™ - SF/DSF							
Thickness / mm	2,84	3,94	4,32	4,70	5,00	5,50	6,35
Hardness / Shore A	39	35	34	34	33	33	33
K factor	17,05	23,97	26,36	28,75	30,63	33,77	39,11
Resolution 120 lpi conventional	3-95%	3-95%	3-95%	3-95%	3-95%	3-95%	3-95%
Resolution 120 lpi digital	2-95%	2-95%	2-95%	2-95%	2-95%	2-95%	2-95%
Isolated line / µm	150	150	150	150	150	150	150
Isolated dot / µm	200	200	200	200	200	200	200

The AFP™-SE/DSE flexo plates can be produced in all Asahi AFP™ processing systems or corresponding processing equipment. The plate is exposed on the back to produce the desired relief depth and achieve maximum sensitivity to UV light. After removal of the protective film, the main exposure is carried out. When an AFP™-D(igital)SE type is used, the removal of the protective film is followed by laser imaging with a commonly available YAG, diode or fibre laser. Then the plate is exposed, dried and finished by UVC and UVA light to ensure the optimum properties of the print-ready plate. AFP™-SE/DSE plates feature excellent compatibility with commonly used solvent- and water based ink systems. After printing, the plates should be thoroughly cleaned. Direct exposure to sunlight and heat during storage is to be avoided.

APR™ - Photopolymer resin

Liquid Photopolymer



APR™ liquid polymer resin are used in flexo printing plates and are suitable for virtually all applications in corrugated-board printing. Their special benefit is fast, economical processing, and since they are processed without the use of solvent, they are particularly compatible with the environment.
The APR™ system comprises two basically different types of polymer, which in turn are divided into different categories of Shore hardness: the softer base polymers compensate for any irregularities of the cylinders and the corrugated board to be printed; the hard capping polymers ensure sharp-contour image transfer combined with extremely low dot gain.
APR™ resins are processed in equipment systems developed by Asahi Photoproducts

Base Polymers

Asahi has several photopolymer types available for the user to choose from, differing in their printing properties.

They differ particularly in the characteristic of Shore hardness, which is in each case ideally suited to the specific requirements of a wide variety of corrugated-board qualities.

Capping Polymers

Here again, the choice is between several photopolymer types.

Each of the capping polymer types is suited in its properties to the particular base polymer type it is to be used with. They influence the results in printing on any quality of corrugated board. Dot sharpness and dot shape, tonal value range and intermediate depths satisfy all demands on quality.

APR™ - Photopolymer resin

Liquid Photopolymer

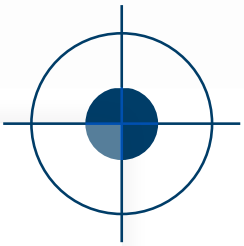
Basic Polymere

	Shore A	Repro	Wash out solution			Ink compatibillity
			Water	Neutral soap	Defoamer	
APR™ F48	+/- 38	3%-90% 120 lpi	98%	2%	0,2%	Water based inks (max.6% alcohol contents), Oil based inks
APR™ F400	+/- 27	3%-90% 120 lpi	98%	2%	0,2%	Water based inks (max.6% alcohol contents), Oil based inks
APR™ F500 (with Fc550 cap)	+/- 18	3%-90% 120 lpi	98%	2%	0,2%	Water based inks (max.6% alcohol contents), Oil based inks
APR™ HybridaA (H-100)	+/- 28	2%-95% 120 lpi	98%	2%	0,2%	Water based inks (max.6% alcohol contents), Oil based inks

Capping Polymere

	Shore A	Repro	Capping layer thickness	Wash out solution			Ink compatibillity
				Water	Neutral soap	Defoamer	
FC 50	+/- 45	2%-90% 133 lpi	0,25mm	98%	2%	0,2%	Water based inks (max.6% alcohol contents), Oil based inks
FC 939	+/- 56	2%-90% 133 lpi	0,25mm	98%	2%	0,2%	Water based inks (max.6% alcohol contents), Oil based inks
F 550 C	n/a	n/a	0,25mm	98%	2%	0,2%	Water based inks (max.6% alcohol contents), Oil based inks
HybridaC (HC-100)	+/- 31	2%-95% 133 lpi	0,25mm	98%	2%	0,2%	Water based inks (max.6% alcohol contents), Oil based inks

Asahi Photoproducts



Processing Units

Asahi AWP™ 2530 Compact

For Flexo Plate with max. size 25x30 inch/63,5x76,2 cm

The new AWP™ 2530 Compact plate processor is Asahi´s smallest AWP™ machine solution for manual operation. It consists of two units, processor and filtration, and is controlled by one central CPU. The processor consists of Washer, Exposure, Dryer, Post exposure and finishing section within one unit. It is a machine designed for the customer with a demand of approx. 300 sqm per year. The combination of the processor and the Asahi AWP™ filtration technology allows a water consumption of 5 litres per plate with a bath life time of up to 30 plates. At the same time the AWP™ 2530 Compact water processor is presenting an environmentally sound solution aiming to drive print forward in balance with the environment.

Main features:

- Maximum plate size 635 mm x 762 mm of 1.14mm and 1.70mm plate thickness
- Water consumption per plate 5 litres with manual wash solution dosing every 5 plates
- Easy plate holder replacement to enhance sticky plate life time
- Stainless steel plate processing and filtration tank
- Easy design for customer with approx. 300 – 400 sqm plate consumption per year
- Washer, Exposure, Dryer, Post exposure and Finisher within one unit. The filtration is connected to the main processor as a separate unit.
- CE approved electrical drawer
- The Asahi AWP™ filtration unit is centrally controlled by the main processor CPU and is the heart of the 2530 Compact machine.
- The AWP™ 2530 Compact satisfies to the highest quality demand using environmentally sound plate processing technologies

Asahi AWP™ 2530 Auto

For Flexo Plate with max. size 25x30 inch/63,5x76,2 cm

The new AWP™ 2530 Auto processor is designed for the emerging demands of the packaging industry with a plate volume of up to 1500 sqm @ year. The combination of processor and plate technology is engineered to deliver a far greater consistency in plate production and therefore in printing. At the same time the AWP™ 2530 Auto processor provides an environmentally sound solution by using a water and detergent solution within the plate making process.

Main features:

- Back exposure, main exposure, wash out, drying and finishing in one processor
- Stainless steel body
- Water and detergent solution
- Integrated filtration system
- Maintenance alarms with user's parameter capabilities Benefits of Processing
- Easy to use process allows accurate reproduction of images
- Plate making time around 50 minutes
- Processing temperatures around 40 C° ensures perfect plate production with excellent dimensional plate stability
- Low odour plate production creates improved work room environment

Asahi AWP™ 4835 P

For Flexo Plate with max. size 36x48 inch/90x120 cm

The New AWP™ 4835 P plate processor is designed for the challenging demand of the middle size label customer using a plate format of 90 x 120 cm / 36 x 48 inch. The processor is engineered to deliver a sustainable quality output with a fast plate access time. At the same time the AWP™ 4835 P water processor is reducing the natural water resources to a minimum, making it an environmentally sound solution in producing printing plates.

Main features:

- User-friendly machine dimensions saves space
  3195 mm x 2056 mm x 1310 mm (LxWxH)
- Maximum plate size 90 x 120 cm / 36 x 48 inch of 1.14mm and 1.70mm plate thickness
- Washed photopolymer residues are caught in an integrated filtration system and a solid
- polymer cake remains.
- Stainless steel body for easy cleaning
- Maintenance alarms with user's parameter capabilities. All important functions are centrally accessible via Touchscreen
- Reverse rotating and oscillating brushes ensure optimum washout performance
- The processor is compatible with the challenging new screening technologies in the industry
- Processing temperatures at around 40 C° ensure perfect plate production with excellent dimensional plate stability
- The AWP™ 4835 satisfies to the highest quality demand using environmentally sound plate processing technologies

Asahi AWP™ 1116 PD Plate Processor/De-Moisturiser

For Flexo Plate with max. size 42x60 inch/106,7x152,4 cm

Main features:

- The AWP 1116 PD processor is an inline processor for customer with a max. of 3 plates inside the machine.
- The machine is using approx. 12 litre per m² of water with 6% of a washout detergent. Water is re-used in a loop which is underpinning our environmental philosophy to drive print forward in balance with the environment.
- The processing temperature is approx. 40°C. Therefore dimensional plate stability is of high accuracy.
- Round brushes with oscillating motion allow uniform wash out of AWP plate
- A PLC control is reducing operator handling and time consuming tasks such as the dosing operation.
- The integrated drying tunnel allows the skipping of the drying process and is making the plate available for the subsequent finishing process.
- Easy maintenance access is reducing machine downtime. All components have been selected with great care and can be reached easily without use of special tools.
- The processor is fitted with sensors to record the life (time and cycles) of the major components. This feature is used to apply predictive maintenance of each component in conjunction with the manufacturer's recommendation.
- Stainless steel frame for easy cleaning

Evo2 line

For Flexo Plate with max. size 25x30 inch/63,5x76,2 cm

EVO2 ALL-IN-ONE

All in one unit. Dual tank. High UV. Cooled bed. Light Integrator

Wvo2 A is an all-in-one plate processing unit with a separate pre-wash section for digital plates. The unit is a single pass inline processor with a high power (30mW/cm²) UVA main exposure, light integrator and controlled lamp cooling system. The processor consists out of a servo drive motor plate transport system for constant washout results plus a volumetric pump for precise polymer solid content control. The four dryer drawers prevent any air leak with quickly reaching its desired drying temperature. The UVA-UVC light finisher can run sequential or simultaneously containing an optical fiber lamp detection.

Please scan QR code to check VIANORD EVO2 line ups

Evo3 line

For Flexo Plate with max. size 36x48 inch/90x120 cm

EVO3 PROCESSOR

The Evo3 Processor is an incremental processing unit with a pre wash section for digital plates and a separate tank. During the wash-out, the plate moves at a constant speed throughout the whole process. An integrated punch system, a storage of up to 8 pin bars and a plate holder to prevent plates dropping on the floor are standard features of the machine.

EVO3 EXPOSURE DRYER AND LIGHT FINISHER

The Evo3 EDLF is a combined unit with exposure unit, integrated four dryer drawers and light finisher section. The unit is available in manual or with automatic lid opening. The exposure section includes a water circulation cooled bed system for uniform and constant temperature and a vacuum system for analog plates. The UVA exposure lamps reach an output of up to 30 mW/cm². The exposure time is controlled by a light integrator which can either operate in mJ or sec. The dyer features an automatic pre-heat option with automatic switch off after the last plate. The light finisher includes an air flow cooling system with sequential or combined UVA-UVC post exposure. The working of all UV lamps on the unit are detected by an optical fiber.

Please scan QR code to check VIANORD EVO3 line ups

Evo4 line

For Flexo Plate with max. size 47x33 inch/120x160 cm

The Evo4 line is identical to the units of the Evo3 line. However, prepared for the larger plate format of 47x33 inches/120x160 cm.

Please scan QR code to check VIANORD EVO4 line ups

Evo5 line

For Flexo Plate with max. size 52x80 inch/132x203 cm

EVO5 PROCESSOR

The Evo5 processor is an incremental processing unit with a pre wash section for digital plates and a separate tank. During the wash-out, the plate moves at a constant speed throughout the whole process. An integrated punch system, a storage of up to 8 pin bars and a plate holder to prevent plates dropping on the floor are standard features of the machine. The Evo5 Processor is available as an incremental as well as a faster batch processor (BP)

EVO5 EXPOSURE

The Evo5 Exposure comes with a temperature control integrated chiller unit with a lamp air cooling system. The clamshell design with a pneumatic lid opener ensures easy handling and prevent accidental closing. The UV light features high output, consistent and uniform distribution due to a light integration system which automatically compensates for any UV output variation. The unit can operate in either mJ or sec.

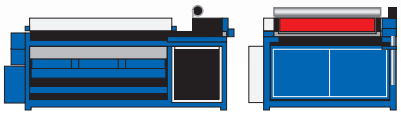
EVO5 LIGHTFINISHER+DRYER

The Evo LightFinisher+Dryer are two separate units. The dyer features 6 drawers with separate heating of every 2 drawers for a uniform temperature control. An integrated exhaust system is standard as well as an operator touch screen. The unit features a programmable warm-up option as well as an automatic switch off after the last plate produced. The UVA-UVC light finisher includes fiber optic lamp detection and can be stacked on top of the dryer for optimal foot print usage.

Please scan QR code to check VIANORD EVO5 line ups

Asahi AWF 110 - Processing equipments

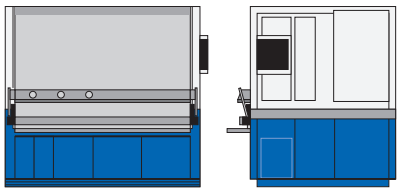
Systems for APR™ Plate Making



AWF 110 E *Laminating/exposing unit*

Lamination/exposure processes › All functions and process sequences of the unit can be input and checked via a programmable controller and visualized on a coloured display. **›** APR™ plates can be laminated to individual thicknesses of 1.7-8.0 mm, with increments of 0.01 mm. **›** Lamination of flexo plates with thickness tolerances of +/-30 µm < 3.94 mm; +/-40 µm > 3,94 mm is ensured. **›** The upper lid of the AWF 110 E unit opens to the rear, with the aid of a motor drive. **›** A light-metering device provides the basis for consistency of exposure results. **›** A capping system, available as an optional extra, allows laminating two photopolymer resins of different Shore hardness, one layer on top of the other.
Postexposure section (Finishing) › The APR™ plate receives its UVA/UVC light post treatment submerged in water. **›** Two digital timers provide the exposure cycle control. **›** The UVC tubes automatically switch off if the drawer is opened before the end of the exposure process.

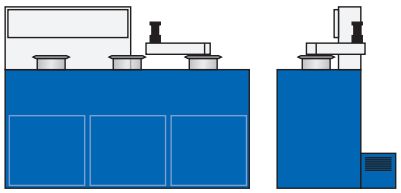
Plate size	762 x 1270 mm
Machine dimensions (L x W x H)	3100 x 2330 x 1340 mm 2150 (H) lid open
Weight	500 kg



AWF 110 W *Processor*

AWF 110 W processing system consists of three sections operating independently of each other. Plate transfer from one module to the next is a manual operation. To ensure trouble-free operation, the plate is fastened to a holding bar which is hooked into the working section in question. Liquid photopolymer recovery The recovery process is automatic. The unpolymerized photopolymer is removed from plate surface and protective film with a rubber squeegee – hot air supporting the process. The APR™ photopolymer thus recovered is collected and remixed with the APR™ liquid photopolymer for further processing in the AWF 110 T unit.
Washer: The plate is washed out in vertical position. The aqueous wash-out solution is sprayed on the plate surface through nozzles, ridding it of liquid photopolymer residue. The rinsing sequence makes the plate ready for the finishing process.
Dryer: The plate is dried in vertical position. A 55°C hot air flow created by 6 fans makes the drying fast and efficient.

Plate size	762 x 1270 mm
Dimensions (L x W x H)	2010 x 1660 x 1860 mm
Weight	1400 kg net



AWF 110 T *Photopolymer supply tank*

To ensure continuous working there are three supply tanks combined in one equipment unit. Two base photopolymer tanks with a volume of 90 l each and a capping-photopolymer tank with a volume of 18 l incorporated in one unit provide sufficient capacity for continuous working. All photopolymer tanks are equipped with level sensors and dedicated heater. The base photopolymer tanks are equipped with an agitator.

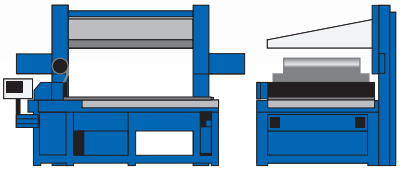
Recycled and fresh APR™ photopolymer are therefore mixed homogeneously and without any problem. An air-controlled pressure system ensures a uniform flow of photopolymer between photopolymer supply tanks and laminating bucket of the AWF 110 E.

Dimensions (L x W x H)	1750 x 850 x 1350 mm
Weight	500 kg net

Asahi ASF 1216 - Processing equipments

Systems for APR™ Plate Making

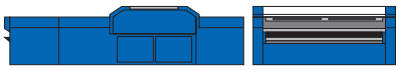
ASF 1216 E *Laminating/exposing unit*



Lamination/exposure processes › All functions and process sequences of the unit can be input and checked via a programmable controller and visualized on a colour display. › Flexo plates can be laminated to individual thicknesses of 1.7– 7.0 mm at increments of 0.01 mm. › Exact plate thickness tolerance within +/- 30 µm <3.94 mm to +/- 40 µm > 3.94 mm is ensured by electronically monitored laminating speed and temperature of the lower glass plate. › Two light-metering devices provide the basis for consistency of exposure results. › A removable light-reduction screen enables the operation to obtain extremely steep relief shoulders and pronounced intermediate depths. › The upper lid of the ASF 1216 E unit (for exposing the back of the plate) is lifted in horizontal alignment. This ensures optimum handling of the laminating-exposing frame from all sides. › The capping system makes it possible to laminate two liquid polymers, differing in Shore hardness, one on the top of the other.

Plate size	1200 x 1600 mm
Machine dimensions (L x W x H)	Laminating/Exposing Unit: 3970 x 1650 x 2820 mm Vacuum Unit: 950 x 500 x 640 mm
Weight	Laminating/Exposing Unit: 4500 kg / Vacuum Unit: 150 kg

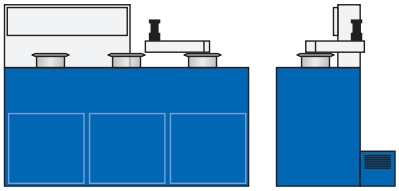
ASF 1216 P *Processor*



The ASF 1216 processing system consists of five modules operating independently of each other. Each module (except the postexposure module) has a cylinder on which the APR™ plate is clamped. Plate transfer from one module to the next is a manual operation. All functions and sequences are controlled via a freely programmable controller. A built-in modem enables swift checking of all function sequences should a problem in operation (remote control) arise. **Plate transfer module:** The plate transfer operation to the processor is made easier thanks to the transfer drum mounted on rails between the exposure unit and the processor. **Photopolymer recovery module:** The recovery process is automatic. The unexposed APR™ photopolymer is removed from plate surface and protective film with a rubber squeegee – hot air supporting the process. The APR™ photopolymer thus recovered is automatically recycled into the photopolymer supply tank. **Wash-out module:** The aqueous wash-out solution is sprayed on the plate surface through nozzles, rinsing it of unexposed polymer. Automatic metering of additional fresh concentrated wash-out solution after each spraying process increases consistency and life of the wash-out bath considerably. **Finishing module:** The APR™ plate is horizontally carried in the module by a chain system and receives its UVA/UVC post light treatment submerged in water. The postexposure water is automatically regenerated after each cycle. **Drying module:** The wet plate is quickly and efficiently dried using a hot-air knife and hot air flow.

Plate size	762 x 1270 mm
Dimensions (L x W x H)	2010 x 1660 x 1860 mm
Weight	1400 kg net

ASF 1216 T *Photopolymer supply tank*



› Two liquid base photopolymer tanks with a volume of 200 l each provide a high capacity for continuous working. › A capping-photopolymer tank with a volume of 36 l provides sufficient capacity for continuous working. › All the photopolymer tanks are equipped with dedicated heater and the base polymer tanks in addition with an agitator. Recycled and fresh APR™ photopolymer are therefore mixed homogeneously and without any problem.
› An air-controlled pressure system ensures a uniform flow of photopolymer between liquid photopolymer supply tank and laminating bucket of the ASF 1216 E.

Dimensions (L x W x H)	1750 x 850 x 1350 mm
Weight	500 kg net

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