Installations all over the World

APL Machinery Pvt. Ltd.

Corporate Office: Plot No. 70, Sector-59, HSIDC Industrial Estate, Faridabad-121004 (Haryana) INDIA.

Phone: +91-129-418 9999 (100 Lines)

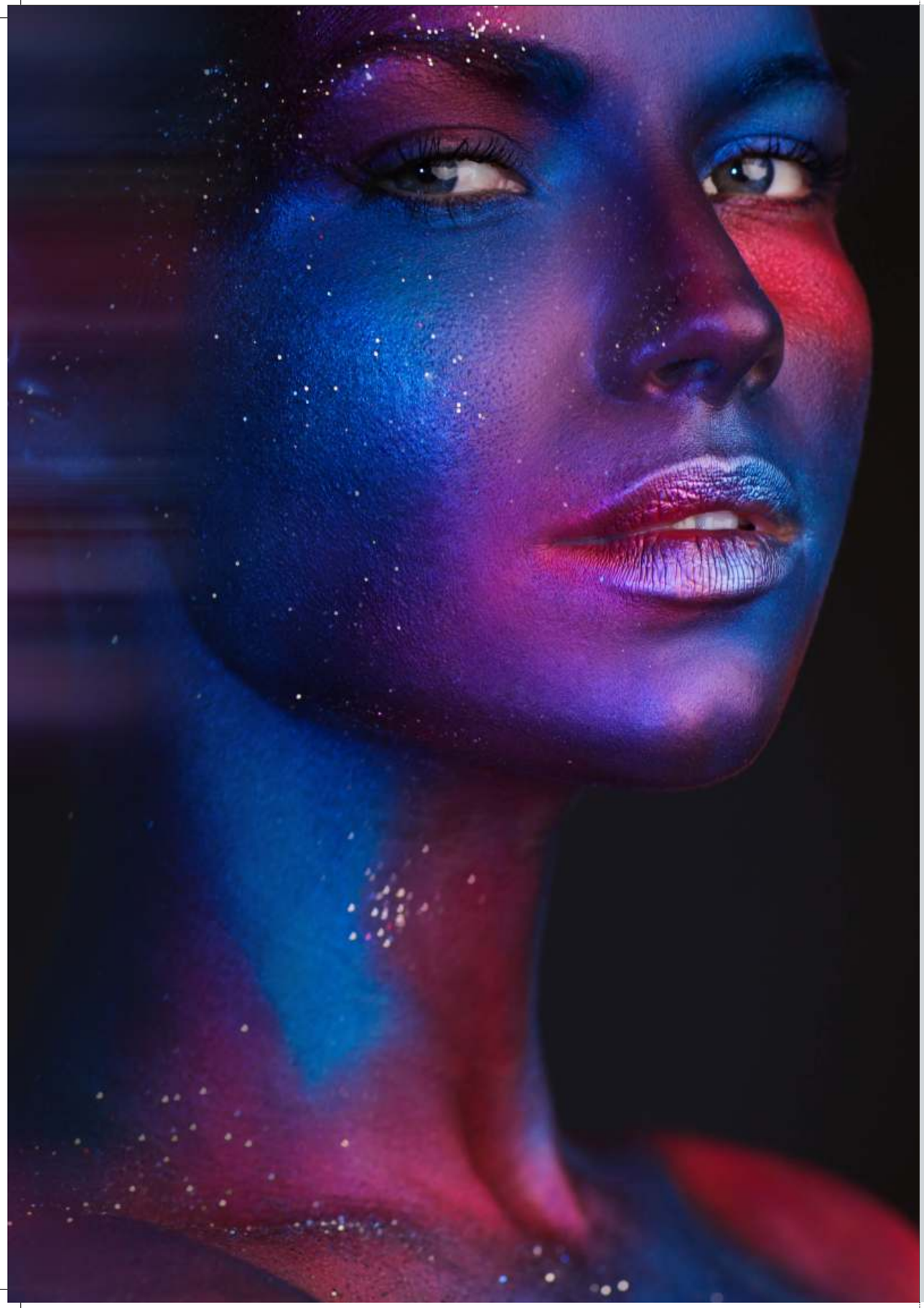
Cell: +91-9811016182, +91-9971346600

Fax: +91-129-410 1612

E-mail: cppaul@aplmachinery.com, abhishek@aplmachinery.com

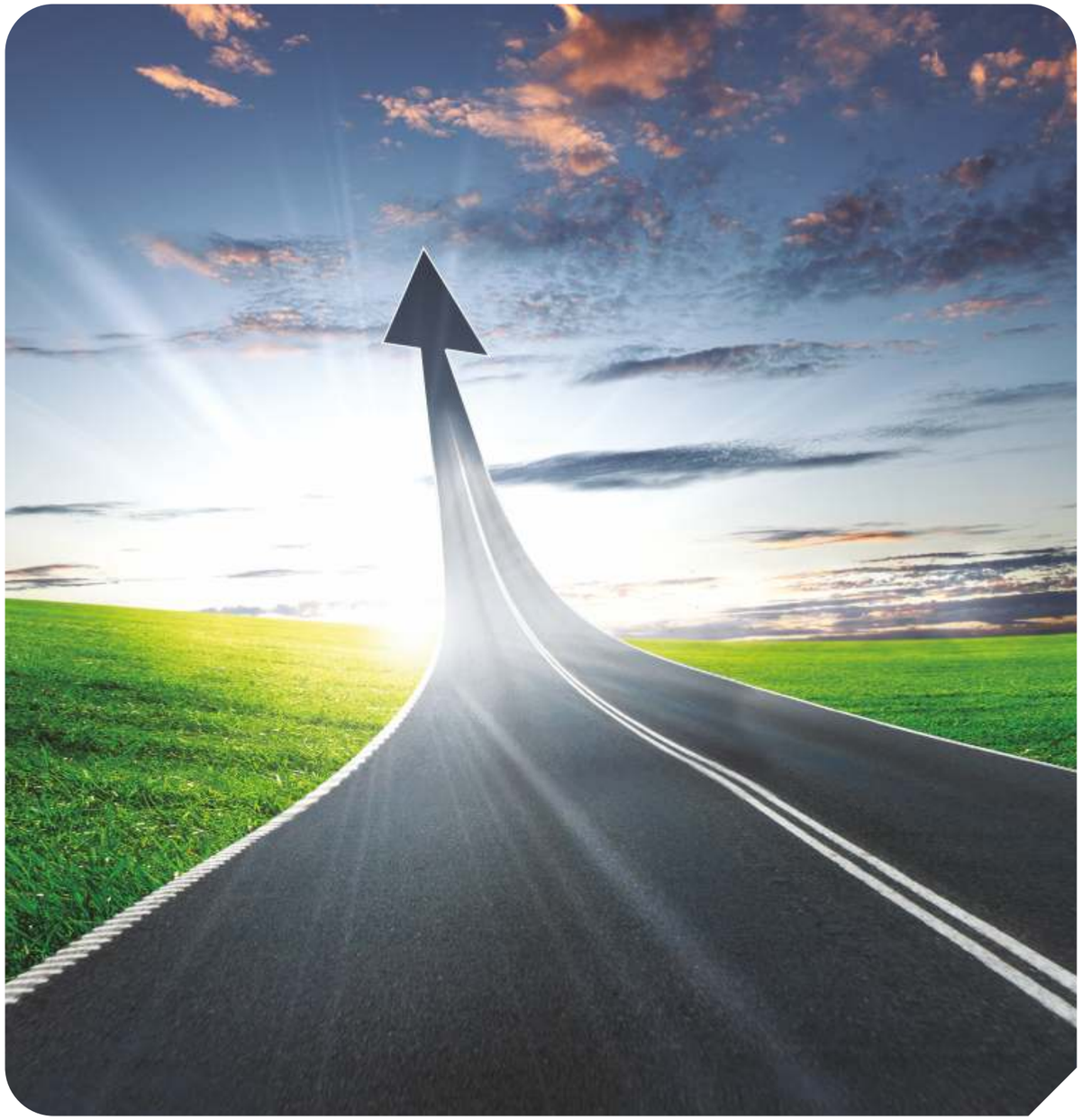
Website: www.aplmachinery.com

Infinite Innovations



Content

Company Profile



APL Machinery Private Limited is one of India's leading Company in the Printing industry engaged in manufacturing of full range of UV Coating & Curing Systems and Screen Printing Machines. APL has the expertise to provide UV Coating solutions for Sheetfed printing (both Online and Offline), Web offset printing, Roto Gravure printing and Wood, PVC profile printing.. In Screen printing industry it has provided solutions for halftone printing , UV special effects for Packaging printing , Round and 3D object printing. Headquartered in Faridabad, this ISO and CE certified company caters to domestic & international market effectively through established network of sales & service centers and foreign channel partners all over the world.

APL is also an authorised channel of :

1) AMS spectral UV USA, the world leader in conventional UV and LED UV systems.

2) Eagle Cold Foil, Cast and Cure System.

3) Ashai Nantai, Die Cutter.

APL is the first Company in India to bring the LED UV technology in India, which is the future solution for the UV printing and coating. APL has already installed some LED UV systems in India. APL's existing R&D section is giving technical support to the American LED UV system to acclimatize to Indian printing conditions.

Keeping pace with the changing environment, technology and needs of the clients, the company's Research and Development unit is constantly focusing on developing tailor made solutions and upgrading the existing ones.

APL has made its presence felt in the International Market thru' its regular participations in key International printing exhibitions like DRUPA, IPEX, China Print, Gulf Print -Dubai, Printing exhibition in Mexico, PrintPack Arabia- Sharjah.

APL Machinery is also honored with star Award in Gold category at Paris in 2001, from the 18th 'International World Quality Commitment' in printing industry convention held in Europe.

The man behind building the brand image of APL MACHINERY PVT LTD. is the Chairman cum Managing Director, Mr. C.P Paul who started the Company by manufacturing screen printing machines in INDIA in 1995 in the name of Abhisek Print Line. Mr Paul, studied the UV technology and started manufacturing UV Systems from 1999. His regular visits to foreign manufacturing units producing UV systems gained him enough experience to indigenously manufacture UV Anilox Roller coaters, Flexo coaters, UV Dryers, Drip Off systems & wood / pvc profile coating and curing machines.

Mr. Abhishek Paul is a Master of Engineering (Mechanical) from Lancaster University joined APL, as Director (Marketing & R&D) in 2015. He also got professional training on LED UV from AMS, USA & Cold Foil from Eagle System in various segments of the Printing industry.

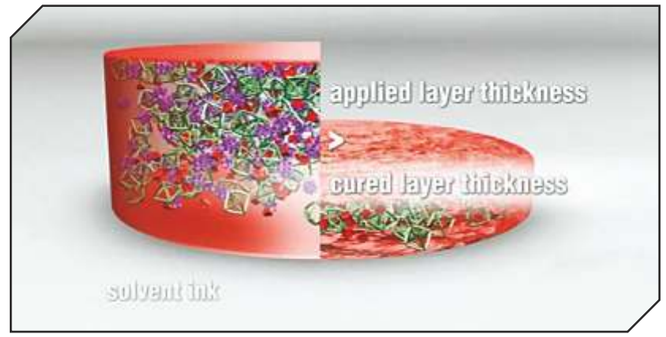
APL's mission is to produce world class quality products and provide world class quality services which Mr Abhishek Paul is ensuring and that has made the APL machinery Users , throughout the world happy..

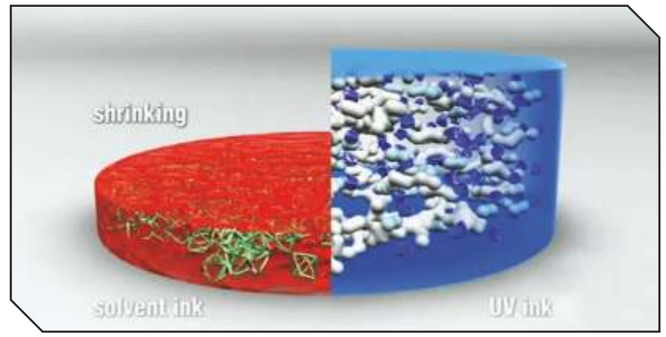
Solvent ink Vs UV ink

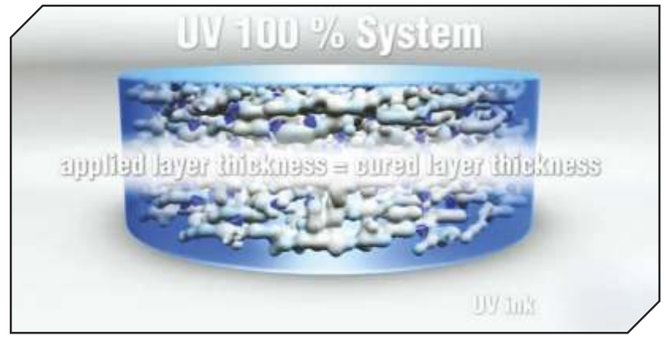
In order to better understand the curing process, you have to be aware of difference between drying of conventional inks and varnishes & uv cured substances.

Conventional inks are either oil based, or contain water or solvents. Oil based ink dry through oxidation of oil containing binding agents. Water or solvent based ink dry through evaporation of volatile solvents, alcohol, water, etc. The drying process is accelerated by the application of heat, in form of infrared radiation but solvent residue requires several hours to evaporate completely. The ink fell shrink, the surface loose gloss due to irregularities in the surface.

UV cured inks & varnishes, on the other hand are solidified by means of the photochemical process which is also known as cross linking. This polymerization is triggered by the action of UV energy on ink or varnish. During this process the photo initiators containing the ink or varnish are converted to free radicals. Throughout the UV curing process, these radicals are insensibly attempting to combine with other elements. During this cross linking process, pigments and other additives are bond in the polymers chain. In the end, during the course of UV curing all elements in ink and varnish are moves to form strong polymer compound. Only when cross linking is complete, the UV or varnish is fully cured and forms a smooth uniform surface. Unlike Conventional inks, UV inks do not contain elements that oxidize or evaporates, on the contrary all the constituents of the UV ink are directly involved in the polymerization process. In this way the UV ink is retained a 100% dried coating. From an environmental point of view therefore UV curing is un-doubtly one of most eco-friendly technologies.







APL UV interdeck

UV Interdeck as the name itself clarifies that it's a UV Cassette system put in the Deck between the two successive Units of a Press complete with Air and / or water cooling system , required to dry UV Inks or UV varnish coatings.

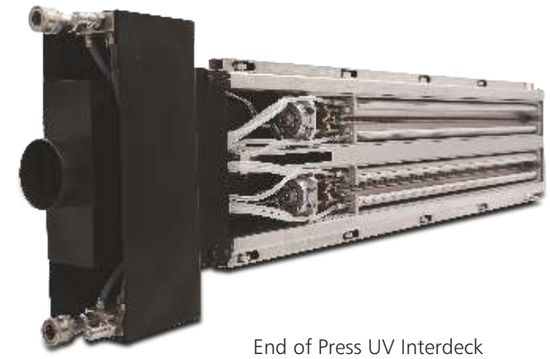
Water Cool UV Interdeck

Features

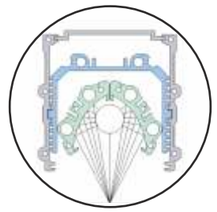
- Instant curing at higher speed of the machine.
- Optically simulated to focus maximum UV energy on the curing area by using special aluminum reflector with dichroic filter.
- Smart Thermo dynamical control for the system.
- Step less Intensity control of the system.
- Intensity of lamp is synchronised with speed of the press.
- Automatic positioned controlled shutter system.
- Automated hibernation system.
- Single connecter for UV, Pneumatics and Other Automation measures
- Graphical control panel.
- Fast inter changeability of cassettes between the stations.
- Multiple safety measures integrated for your press to protect your press from fire hazard.

Applications

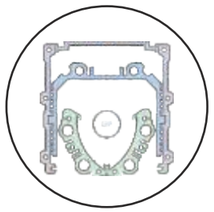
- Curing of UV inks on different substrate (absorbent ,non absorbent, metalized)
- High deposit inks curing is possible
- Increases the Productivity of the machine
- UV coating gets online and reduces the number of processes to do UV for the job.
- No Powder or water base coating required for the protection of the colour printed.
- UV effects like GLOSS, MATT, TEXTURE (Drip-off/Hybrid) can be done online.



End of Press UV Interdeck



UV light ray digram



Interdeck shutter system

Sheet fed Offset

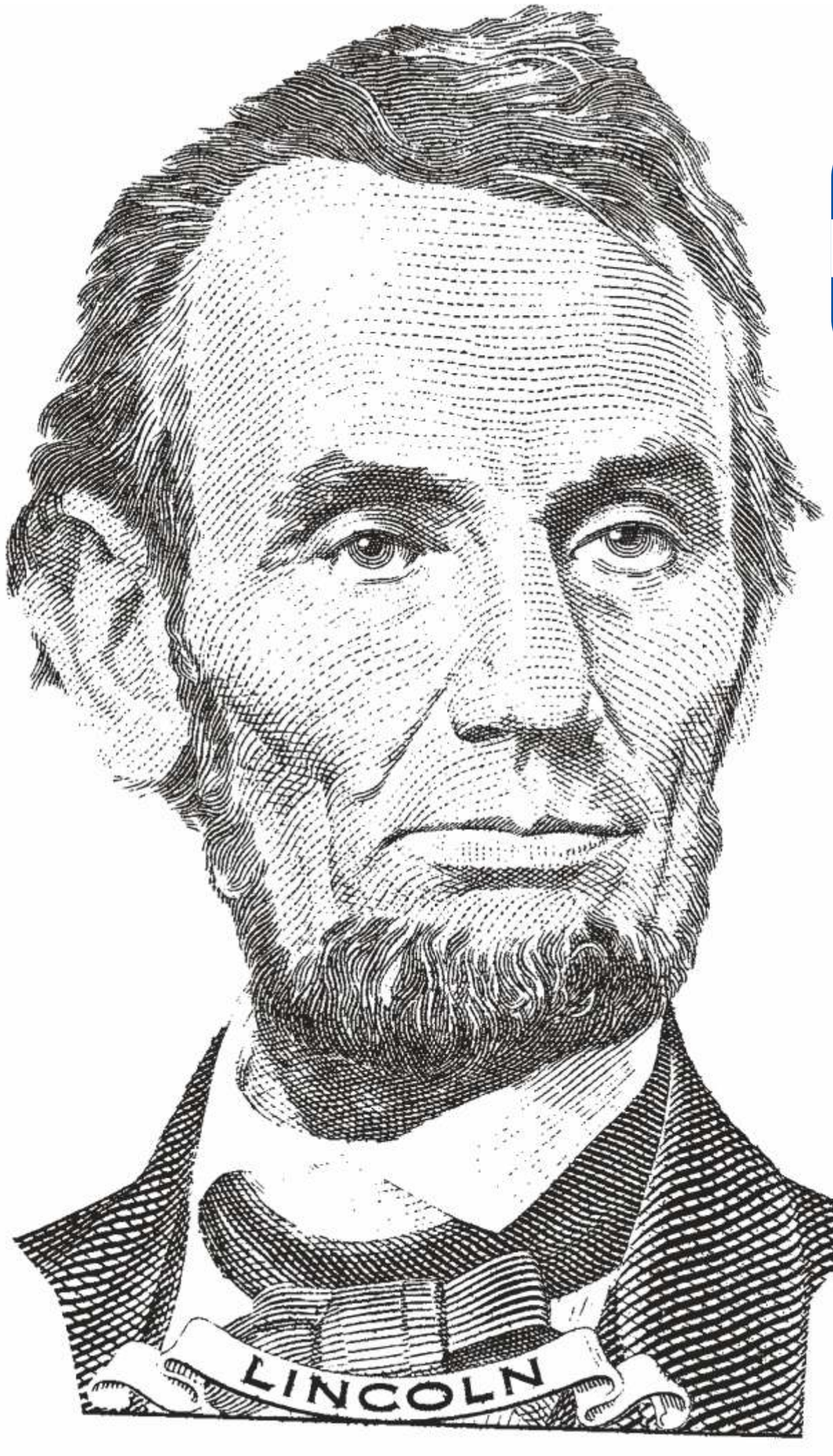
Web Offset

Gravure

Flexo

Advantages of APL UV systems

- 20 years of manufacturing experience in UV equipments
- Designed and Manufactured in India
- Customised systems can easily be manufactured
- Spare parts availability 24x7
- 1 Year Product warranty
- Regional Service Centres in all 4 Zones of the India
- Service Team availability within 48 Hours
- Expert advice and support on applications of UV
- Can be easily installed in all kinds of Printing machines



Electronic power supply

EPS Features	EPS Benifits
High-frequency (8~16KHz) Square Wave	Increased UV Intensity output (20% - 30%) Reduces the Dipole overheating Can work at FLASH mode to save energy
Tunnelling System	Lamp life is increased Warm-up time of the lamp is less
Micro-process Dynamic Control	Best efficiency(>95%) of the Lamp over the time Find the best working point of current and voltage Control and recovery of the external events
High-Speed and Soft Switching IGBT	Automated fast response Requires less than 1 second to switch from stand mode to full intensity.
True Power Regulator with Magnitude Control	Fully Stepless regulation Minimal power is 5% for standby mode. No special algorithm from customer is required
Phase Balance	Power factor is 96% No inrush current Cos $\varphi = 1$
Self-diagnostics and Protection	Self-diagnostics Protection technology
Excellent Compact Design	Weight is 5 times less Volume is 8 times less Easy to setup Italian Design

INCREDIBLY RELIABLE
ENERGY EFFICIENT
FLEXIBLE UV FOR
A NEW ERA OF PRINTING

AMS UV Interdeck

The P3 UV is the third generation of AMS's award-winning and patented Peak UV Curing System — representing an entirely new class of standard UV curing. An advanced modular system that is flexible, reliable and easy.

- The P3 UV™ System was designed to eradicate downtime and outlast everything in its class — critical requirements for modern printing profitability.
- P3's modular components can be changed, checked, or cleaned quickly and easily, and without tools. UV lamps slide into position with a guaranteed plug-and-play locking mechanism.
- Each module tracks its lamp hours automatically.
- P3 E-Flex™ 100% electronic ballasts can be specified on most systems providing an ultra-efficient, high frequency waveform that eliminates dark-out phases.
- The all-new P3 Titanium™ edition allows hybrid compatibility with both traditional UV inks and coatings, as well as with a new generation of High Wavelength UV (HUV) products, that reduce the amount of energy required for curing and eliminate the need for multiple UV units.
- The mechanical and electrical integrity of P3 are proven not only through stringent UL and CE certifications, but through thousands of hours of testing and faultless operation in real world conditions.
- P3 was engineered as a single core technology to work seamlessly with all leading OEM equipment, including the multi-color sheet-fed offset presses from Heidelberg, KBA, Komori, manroland, Mitsubishi, Ryobi, Akiyama, Sakurai and others, as well as Web Offset and Flexo presses from most manufacturers.

LEDUV™

LED UV Systems

High Performance LED

Sheetfed Offset Printing

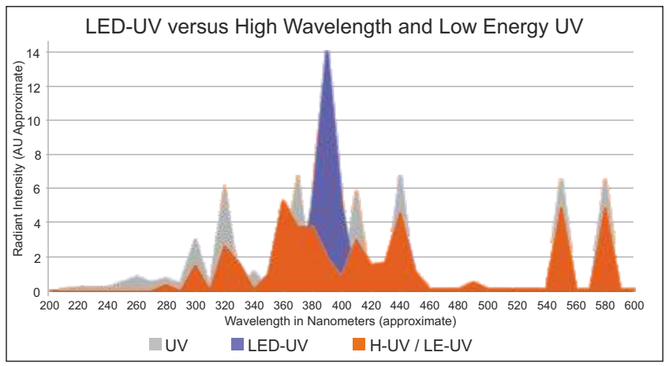
The AMS XP Series LED UV™ is the world's leading UV LED technology for sheetfed offset printing and can be installed on just about any machine.

Patented AMS LED UV™ XP Series modules provide next generation curing power for high speed commercial, packaging and plastics presses.

Single Units: Performance + Control™ (PC) Series | Power Driver

Why choose LED UV?

- Faster Press Speeds
- Removal of Heat
- Print Thinner Stocks
- Better Substrate Adhesion
- Greater Assurance of Cure
- Lower Energy Consumption
- Elimination of Mercury & Ozone
- Very Little Maintenance Required
- Reduction of Downtime



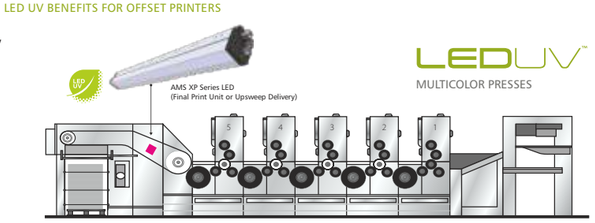
LED UV FOR SHEETFED OFFSET

AMS XP SERIES LED BENEFITS

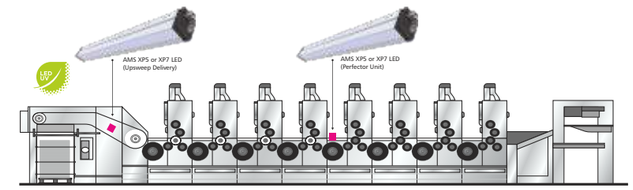
AMS LED systems are designed to meet the highest production speeds and most intense drying applications in sheetfed, perfecting, web, folding carton packaging and plastics printing:

- Huge power saving
- Only 1 LED Cassette Required for 4 colour printing, UV coating (OPO + DripOff)
- No warm-up/cooling time (Instant On/Off)
- No Heat generation/cold UV
- Lamp Life more then 30,000 hours.
- No top coating required for protection of printing
- Machine can run on full speed
- High fidelity and gloss in printing
- No smell
- Curing upto 365% ink coverage
- Compatible with all presses
- Incredibly Fast ROI

LED UV BENEFITS FOR OFFSET PRINTERS



PERFECTOR PRESSES



LED UV BENEFITS FOR OFFSET PRINTERS

- **Instant drying** speeds production, eliminates marking and increases profitability
- **Instant On/Off** eliminates waiting time from the dryer warm-up and cool-down
- **No heat transmitted** protects the machine and eliminates plastic substrate issues
- **No ozone and no mercury** content contribute to a clean, safe working environment
- **Long life** from the LED modules with proper running and cooling conditions

LEDUV™

LED UV Systems

LED UV for Flexo

Benefits of LED UV for FLEXO

- Faster press speeds - up to 100% greater press production
- Absence of heat to the rolls
- Assurance of cure - every time
- Significant energy savings - up to 70%
- Instantly ON and OFF - no cool-down or warm-up cycling required
- Greater uptime - less downtime
- No blower noise or odors
- No environmental impact - eliminate mercury and reduce VOC's
- ROI measured in months - whether on a new press or retrofitted

LED UV for Web Offeset

AMS WEB Series™ LED UV

Benefits of LED UV for Web Offset

- Significant Reduction of Energy
- Reduction of Drying Space
- Elimination of Wavy Sheets
- High Quality at High Output Economics
- New Stock Types
- Less Ink Consumption (-28% Heatset, -40% Coldset)
- Virtually Zero Maintenance
- Increased Safety
- Easy Permitting

COLD FOIL system

Graphic Arts Systems is THE leader in the design and manufacture of foil stamping and print enhancement equipment with their Eagle Systems ® brand. The Eagle Systems ® machines have stood the test of time and have been a long time favorite for conversion of automatic die cutting platens and lithographic printing presses. The headquarters and manufacturing facility are located in Ocean, New Jersey, USA which is about one and a half hours drive south from Manhattan, New York or one hour south from Newark Liberty International Airport, New Jersey.

Cold Foil User Benefits

The design team addressed all the inconvenience of previously existing cold foil systems and came up with a simple and efficient design that means value for you:

- Installation in 2-3 days, running production on the 4th day
- Training in 2 hours
- Extremely simple to use, fully automatic functions
- No foil dust
- No speed limitation
- High productivity
- Cost efficient, flexibility to run any combination of narrow and wide webs
- No web break incase of only emergency stop

PROCESS OF COLD FOIL

The Cold Foil application consist of applying a metallic layer on your printed substrate.

There are basically 2 steps:

STEP 1: Apply an adhesive to the substrate.

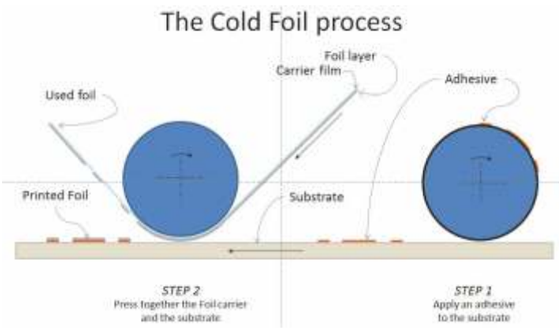
This application can be done in register and according to a printing pattern using one of the printing units in the printing press.

STEP 2: Press together the Foil carrier and the substrate (with the printed adhesive).

The Foil will be released from the carrier onto the substrate wherever the adhesive was printed.

In a sheetfed offset press, we use 2 printing towers to perform the cold foiling.

One printing tower is used to apply the adhesive, it is just printed as a normal offset ink. The second printing tower is used to press the substrate and the foil carrier together. It is also very easy to switch from foiling to normal printing, you therefore keep all the flexibility of your press.



Fully Automatic Die Cutting & Creasing Machine

Products Information

The machine is mainly used for die-cutting, creasing and cold pressing cartons, cardboard boxes and labels in packaging and decoration industry, especially for various exquisite printing, such as cigarette packs, wine boxes, gift boxes, home appliance boxes, cosmetic boxes, etc. The machine can mark convex-concave impression, providing stereoscopic printing. Machine automatically run from feeding section, and die-cutting section and delivery section, has many functions and advantages such as automatic checkout function, failure indication function, non-stop exampling function, heavy die-cutting pressure, high registration precision, etc.

The main driven system of this machine equips magnetic clutch and brake. The main sprocket shaft equips torsion limiter(safety clutch). There are many safety detective cameras and safety devices, utmost avoid the damages of operator due to emergency, providing safety for person and equipment.

Specifications:

quality	high
Technology	ASAHI
speed	high
Suitable Industry	offset, label paper
Voltage	380v
Computerized	Yes
Automatic Grade	Automatic
Power(w)	19kw
Weight	13tons



Automatic Die-cutting and Creasing Machine

Suitable for the following industries:

Packaging - Corrugated board

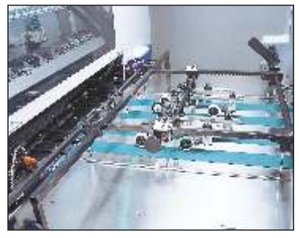
Main processed materials:

Corrugated board, Heavy solid board, Paper, Carton board, Semi-rigid plastics.

Service: whole plan design, training and coaching.

Specifications:

Maximum sheet size	740x1600mm
Minimum sheet size	270x400mm
Maximum cutting size	730x1050mm
Minimum cutting size	270x400mm
Minmum gripper size	8mm
Maximum speed	7500i.p.h
Maximum operational pressure	250tons
Required power supply	19KW
Inside size	764x1120mm
Paper thickness	For cardboard: 0.1-1.5mm
	For corrugated board: 4mm B flute
Die-cutting precision	±0.1mm
Net weight of machine	13tons
Exterior sizes	5708x3700x2290mm(2290mm)



Folder Gluer → Fully Automatic Lamination

ACE MACHINERY

Technical Data

Blank width – Straight line Lock bottom 4 corners	80 – 1100 160 – 1075 185 – 1050	mm
Blank length – Straight line Lock bottom 4 corners	70 – 900 150 – 900 185 – 900	mm
Folded box width – Straight line Lock bottom	35 – 545 75 – 530	mm
Folded box thickness – Straight line Lock bottom	4.5 7.5	mm
Production speed, up to	400	m/min
Corrugated board	E-F-N	flute
Soled board, up to	800	gsm

Specifications:

MACHINE LENGTH	13,700MM
FRAMEHEIGHT	650MM
FRAME THICKNESS	16T
LOWERCARRIER THICKNESS	16T
TOTAL CONNECTED LOAD	21.2KVA
MAIN MOTOR	AC 15KW (KOREA)
INVERTER	MITSUBISHI / FUJI (JAPAN)
OPERATING PROGRAM	PROFACE (JAPAN)
MOTORIZED CARRIER MOVE	GCM (KOREA)

Specifications:

Max Paper Size	1050X1200mm
Min Paper Size	350X350mm
Paper Thickness	105-500 g/m2
Laminating Speed	0-120m/min
Gross Power	25kw
Weight	5000 kg
Overall Dimensions	9550x2400x1900mm
Pre-stacker	1850mm

Fully Automatic High-speed Laminator

Auto Feeder
Side Lay Regulator
Electromagnetic Heater
Human-computer interface
High Speed Separating system
Double Film Shaft
Corrugrated Delivery
Anti-curvature Device
Automatic Stacker

A World class product from APL. This machine can be used as Offline coater for UV & Aqueous coating as well as for primer coating. It can do full and spot UV varnish on thick & thin paper at the speed of 6000 or 10,000 sheets per hour. Conventional varnish or water based varnish can also be run on this machine.

This machine includes all technical solutions for easy operation and for increasing productivity. The machine is compact and solid built on a strong C.I. frame. It is reliable at any working speed. This machine is equipped with high grade hardened grounded gears for its smooth operation for years. The UV curing lamps used in it are one of the best in the world. It consists of total vacuum bed for smooth conveying of paper and board,efficient cooling system for lamps.

IR lamps are also used for water base varnish or smoothness of UV lacquer.

FULLY AUTOMATIC UV COATING & CURING MACHINE (SPOT & FULL) HIGH SPEED MODEL

High Speed Model

Technical Specification:

Model	APL UV 2840
Maximum Sheet Size	723 mm x 1028 mm
Minimum Sheet Size	330 mm x 406 mm
Max. Coating Area	698 mm x 1016 mm
Max. Speed	10000 sheets per hour
Plate Size	865 mm x 1035 mm
Pile Height of Feeder	1250 mm
Pile Height of Delivery	1200 mm
Plate Cylinder Diameter	320 mm (with blanket)
Imp. Cylinder Diameter	320 mm
Space Requirement	L-11583 x W-3353 x H-2439
Machine Dimension	L-9854 x W-2134 x H-2439
Paper Thickness	80 to 400 gsm
Power (Coater)	6.2 KW
Power (UV Dryer)	12 KW (Single Lamp)
Weight	7 Ton

*Model APL UV 2840 that refurbished Offset Press Feeder will be used

Features

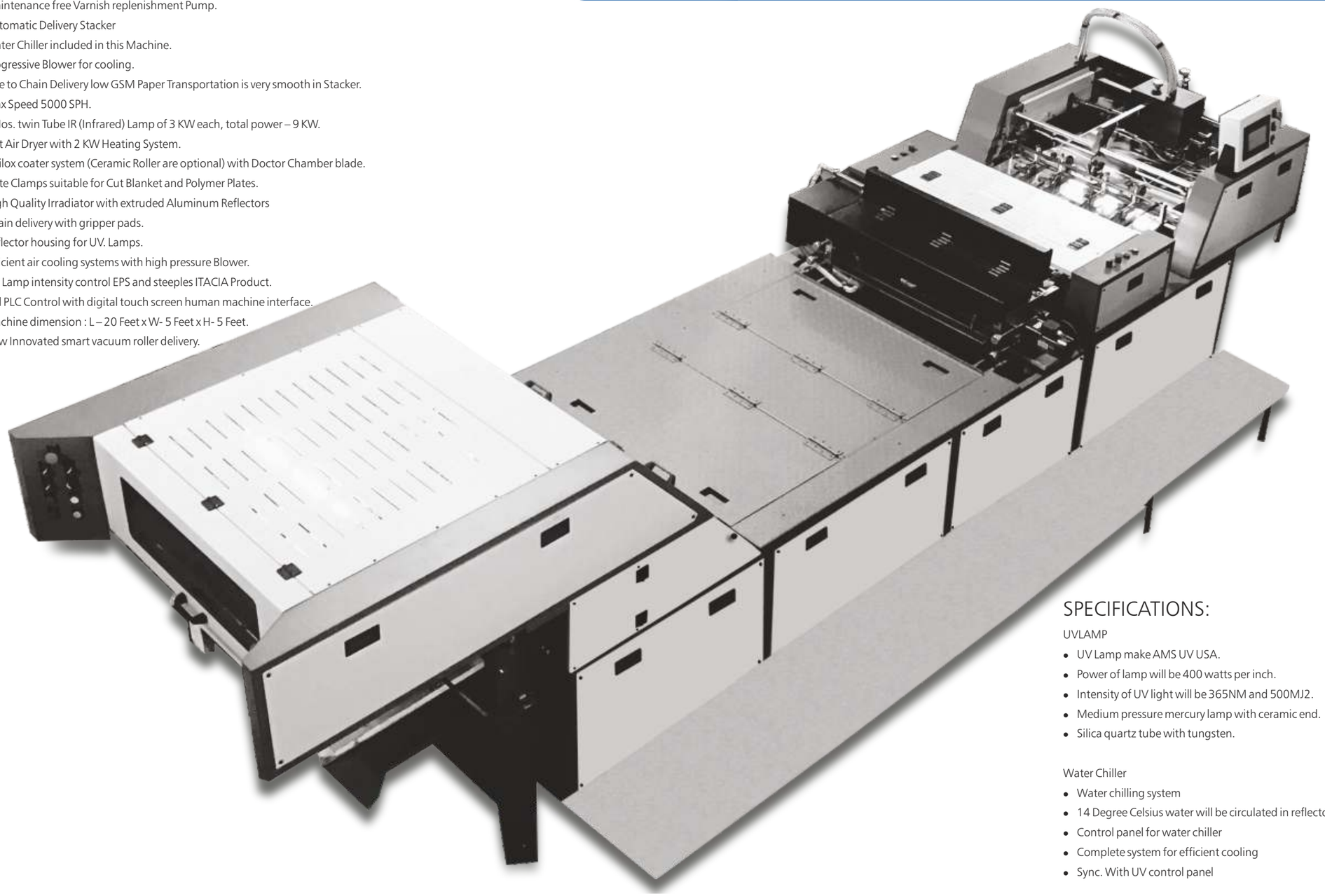
- Precise registration at high speed using a precision adjustable side and front lay.
- Powerful stream feeder to handle stocks from 80 G.S.M to 450 G.S.M.
- User adjustable Double Sheet Detector.
- Maintenance free Varnish replenishment pump.
- 2/3 UV Lamps of 300W/inch as optional.
- Swing Arm Gripper for high speed & accurate registration.
- Micro adjustable front lays for easy and precise registration on the run.
- Adjustable side lays are given for front and reverse jobs registration.
- Delivery to accommodate a conveyor for hot air/U.V.dryers.
- Pneumatically actuated Anilox roller and impression cylinder.
- Quick change Anilox roller.
- Doctor blade assembly with doctor blade angle adjustment.
- Plate clamps suitable for clamping blankets or photopolymer plates.
- Full PLC control with digital touch screen human machine interface.
- Curing speed of up to 10000 speed per hour.
- Precise and Consistent coating weight with every job.

Fully automatic Coating & Curing machine capable of Full & Spot coating with UV dryer and IR dryer with hot air for UV and Aqueous curing, respectively, comes with the following features:- Precise registration at high speed using precision adjustable side and micro adjustable front lay.

APL- UV 2232 FULLY AUTOMATIC UV COATING & CURING MACHINE (SPOT & FULL) NEW MODEL GRIPPER TO CHAIN DELIVERY SYSTEM

Features

- AMS P3 Patented UV Cassette USA Make.
- Powerful stream feeder to handle stocks from 60gsm to 450 Gsm.
- User adjustable double Sheet Detection Device.
- Cross Sheet detector
- Maintenance free Varnish replenishment Pump.
- Automatic Delivery Stacker
- Water Chiller included in this Machine.
- Progressive Blower for cooling.
- Due to Chain Delivery low GSM Paper Transportation is very smooth in Stacker.
- Max Speed 5000 SPH.
- 3 Nos. twin Tube IR (Infrared) Lamp of 3 KW each, total power – 9 KW.
- Hot Air Dryer with 2 KW Heating System.
- Anilox coater system (Ceramic Roller are optional) with Doctor Chamber blade.
- Plate Clamps suitable for Cut Blanket and Polymer Plates.
- High Quality Irradiator with extruded Aluminum Reflectors
- Chain delivery with gripper pads.
- Reflector housing for UV. Lamps.
- Efficient air cooling systems with high pressure Blower.
- UV Lamp intensity control EPS and steeples ITACIA Product.
- Full PLC Control with digital touch screen human machine interface.
- Machine dimension : L – 20 Feet x W- 5 Feet x H- 5 Feet.
- New Innovated smart vacuum roller delivery.



Technical Specification:

Model	APL UV 2232
Maximum Sheet Size	571 mm x 825 mm
Minimum Sheet Size	300 mm x 400 mm
Max. Coating Area	546 mm x 813 mm
Max. Speed	8000 sheets per hour
Plate Size	813 mm x 640 mm
Pile Height of Feeder	850 mm
Pile Height of Delivery	1050 mm
Plate Cylinder Diameter	280 mm (with blanket)
Imp. Cylinder Diameter	280 mm
Space Requirement	L-8550 x W-2600 x H-2000
Machine Dimension	L-7925 x W-1829 x H-2000
Paper Thickness	80 to 400 gsm
Power (Coater)	4 KW
Power (UV Dryer)	9 KW (Single Lamp)
Weight	6 Ton

*Model APL UV 2840 that refurbished Offset Press Feeder will be used

SPECIFICATIONS:

UVLAMP

- UV Lamp make AMS UV USA.
- Power of lamp will be 400 watts per inch.
- Intensity of UV light will be 365NM and 500MJ2.
- Medium pressure mercury lamp with ceramic end.
- Silica quartz tube with tungsten.

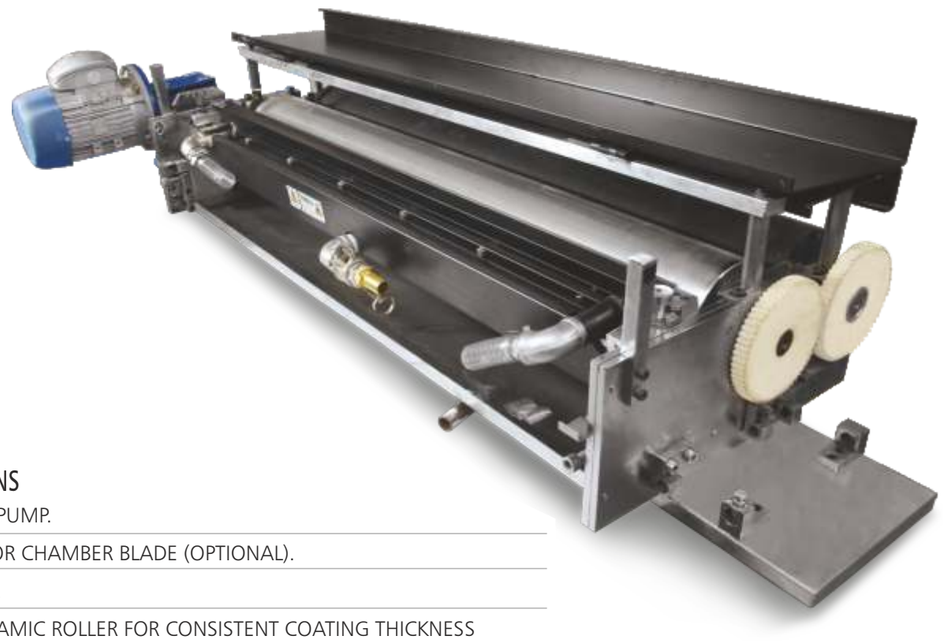
Water Chiller

- Water chilling system
- 14 Degree Celsius water will be circulated in reflector
- Control panel for water chiller
- Complete system for efficient cooling
- Sync. With UV control panel

EPS Inverter

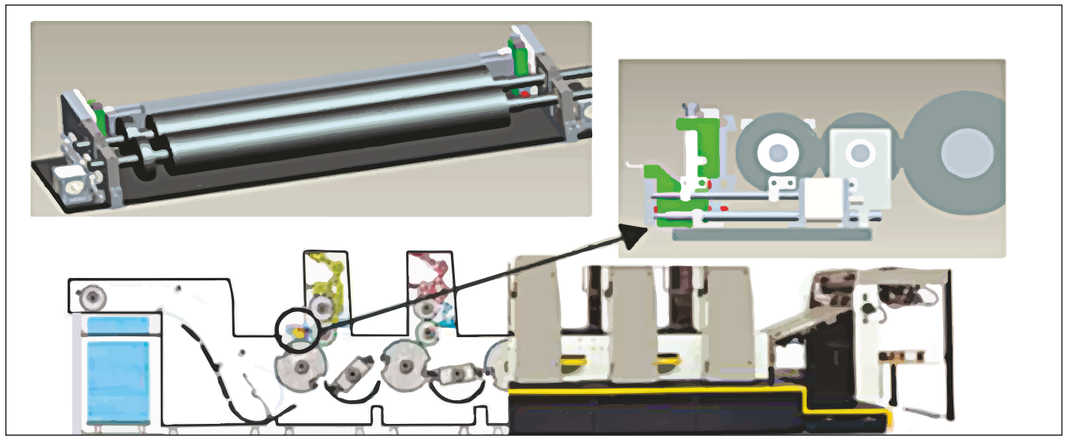
- Warm up time Is less which means less start time of UV lamp
- Standby @ 10% mode, make more lamp life
- 10 to100% intensity of lamp infraction of seconds
- Sync with press speed (Lamp intensity can vary with press speed)
- Less Power consumption
- No humming gas transformer and other electrical components are less inside the panel
- Step-less regulation of lamp form 10-100%.
- Self diagnostics Protection technology for minor electrical faults
- Less Heat inside the panel

ANILOX COATING ATTACHMENT



SPECIFICATIONS

- DIAPHRAGM PUMP.
- TRESU DOCTOR CHAMBER BLADE (OPTIONAL).
- POWER 2 KW.
- ANILOX / CERAMIC ROLLER FOR CONSISTENT COATING THICKNESS



DOUBLE STATION UV MACHINE FOR DRIP OFF (HYBRID UV)

APL Double station UV and Aqueous coating and Curing machine is designed for offline drip off coat , Spot coat and Spot not Coat (besides full coat) on printed substrate. This two station is a combination of a Offset unit and a Flexo Unit for perfect texture. For partial curing of matt varnish coating done in the first unit , a water cooled UV Interdeck cassette is placed after the first Unit. After the second Unit a combo Dryer consisting of UV , IR and Hot Air on a Conveyor is put along with an automatic stacker to get Textured coating at 6000 impressions per hour (maximum).

Technical Specification

Model	APL UV 2x2030	APL UV 2x2840
Maximum Sheet size	530 x 785 mm	725 x 1016 mm
Coating Area	500 x 750 mm	700 x 1000 mm
Paper weight	100 to 400 gsm	100 to 400 gsm
Power	35 KW	50 KW
Extra Power for IR Lamp	12 KW	16 KW
Speed	6000 lms per hr.	6000 lms per hr.

Applications

1st Station	Interduct	2nd Station	Interduct
UV Primier	UV Lamp	UV Full or Spot	UV Lamps
UV Texture	UV Lamp	UV Spot	UV Lamps
UV Printing (on metlized substrate)	UV Lamp	UV Spot or Full	UV Lamps
UV Printing	UV Lamp	Aqueous coating	IR Lamps

*3040 model APL can convert existing or refurbished 2 color Offset units to Double station Hybrid UV machine.

FULLY AUTOMATIC HIGH SPEED ROLLER COATER AND CURER

APL RC is a Manual Feed Coater for duplex boards and thick paper above 130 Gsm. It is an offline coater and its quiet economical. It coats all types of UV Coating, Aqueous or any other lacquer/varnish very smoothly. It is compatible for all kinds of surface's i.e. Paper, Board, Plastic, Profiles, Wood, Bamboos, Metal, Glass or various other flat objects.

This machine is available in variant sizes.

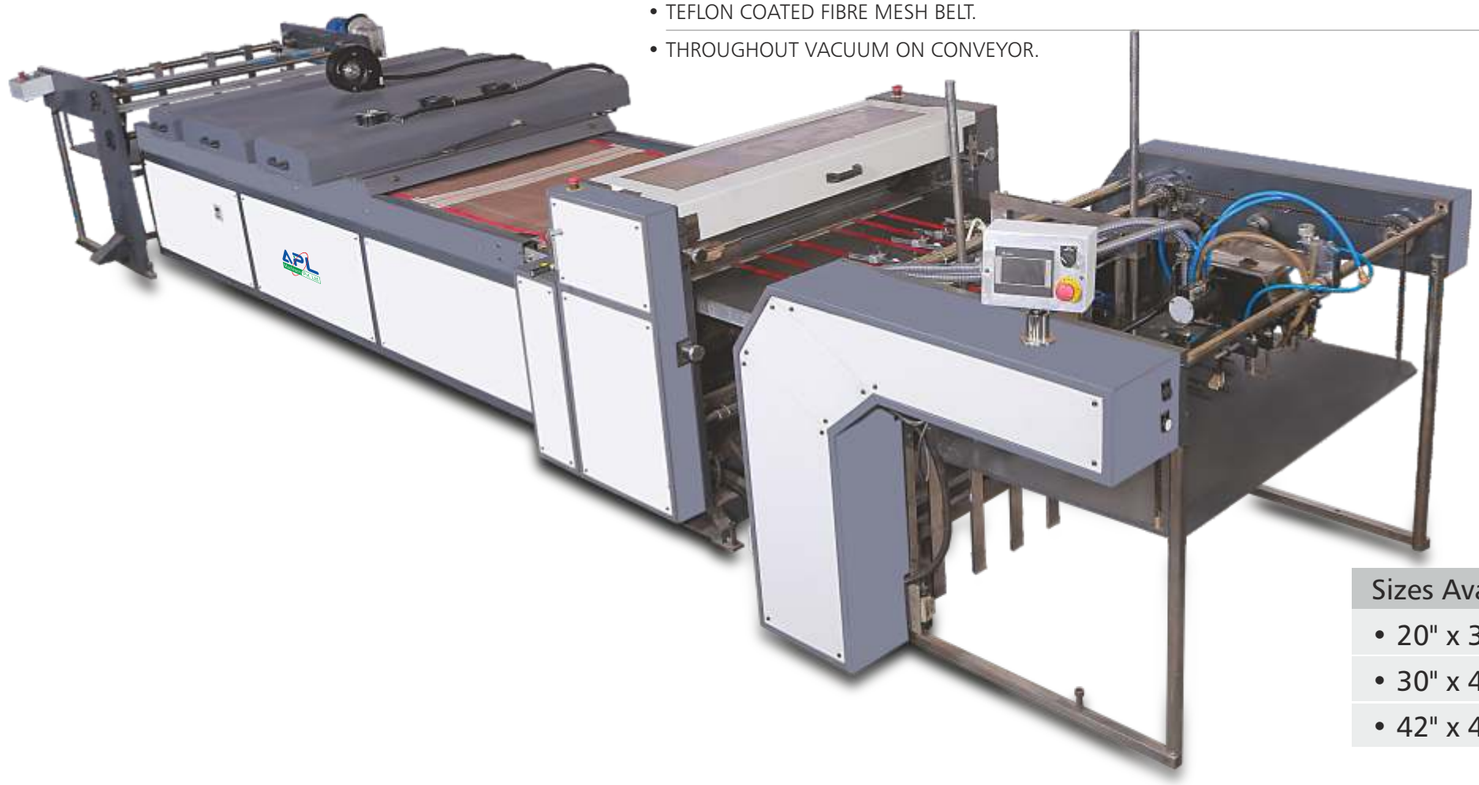
Features:

- AC drive for variable speed control.
- Compatible rubber rollers for UV and Aqueous base coating
- Noiseless operation
- Variable size of substrate can be coated.
- Air Knife (Optional)

Manual Feed Roller Coater

SPECIFICATIONS

- HIGH PILE FEEDER WITH 4 PICKING & 4 FORWARDING SUCKERS
- MAX SPEED: 5000 SPH.
- HEAVY DUTY ROLLER COATER FOR UV AQUEOUS AND BLISTER COATINGS.
- AIR KNIFE FOR PAPER/BOARD OF THICKNESS BETWEEN 450 GSM AND ABOVE 200 GSM.(BUT NOT APPLICABLE ON BLISTER COATING)
- BLISTER COATING IS POSSIBLE FOR PAPER/BOARD THICKNESS ABOVE 450 GSM
- DIGITAL CONTROL SYSTEM FOR ADJUSTMENT OF COATING THICKNESS.
- IR+ HOT AIR FOR AQUEOUS & UV COATINGS.
- UV LAMP OF 300W/INCH LIGHT INTENSITY WITH HIGH QUALITY REFLECTOR FOR UV COATINGS.
- AUTOMATIC STACKER WITH SHEET COUNTER.
- EASY TO OPERATE AND QUICK MAKE READY TIME.
- SERRATE TANKS FOR AQUAS AND UV.
- IN CASE OF POWER FAILURE UV HOOD WILL OPEN AUTOMATICALLY.
- TEFLON COATED FIBRE MESH BELT.
- THROUGHOUT VACUUM ON CONVEYOR.



Sizes Available
• 20" x 30"
• 30" x 40"
• 42" x 42"

UV CURING SYSTEMS

UV Curing System(of coating by ultraviolet radiation) is a cross chemical reaction when UV varnish or ink is applied to object and when it passes through UV light it gets cured instantly. It is basically a Polymerization of UV Lacquer on object through UV Light. UV Curing System is available in different sizes and power.

Offering a full range of following UV Curing Machines:

High Speed UV Curing Machine

UV Curing is a polymerization (cross linking reaction) when UV varnish or ink is applied to a substrate and when it passes through UV light it gets cured instantly. It is basically. UV Curing System is available in different sizes and for different applications like Sheet Fed, Web Offset Printing, Screen Printing, Letter Press, Flex, Gravure, Varnishing or Roller Coating.

We have various kinds of UV Curing systems for different kinds of application. They are available in all sizes from 4" to 72" and different intensities of 200 to 400 watts/inch with option of 1, 2, 3 lamps in one machine. APL UV Curing systems can be customized to meet all your needs. This system can be configured with HOT AIR & IR modules also.

FEATURES

- UV intensity management (25%, 50%, 75%, 100%)/ Hibernation mode.
- Optically simulated to focus maximum energy of the substrate passing below the lamp.
- High speed UV curing process..
- Hot Air and IR Module.
- Teflon conveyor belt.
- Machine can be configured with printing or coating machines to make all your processes an online.
- Vacuum bedded to hold the paper on to the conveyor.
- Auto Lamp of on lifting of Hood
- Suction blower for efficient thermal control system
- AC drive for variable speed of conveyor.
- Panel constructed within the panel
- Automatic stacking system.
- Conveyors with hydraulic system to adjust the height of the conveyor system
- Auto Power Hood (The hood gets lifted pneumatically when there is a power cut or paper gets jammed.
- Lamp hours display.
- Emergency switch

Applications

Paper	PVC Profile	Shoe Industry
Board	Plastic Components	Tiles
Metal Sheet	PCB	Helmet
Wood	Medical	Automobile Filter
Glass	Photography	Watch and Clock

Flexi UV Curing Machine

Table Top UV Curing Machine

UV Curing Machine

UV IR Hot Air combo

UV Curing With Stacker for Sheetfed Offset

UV Curing with Stacker for Sakurai

3D UV Curing System

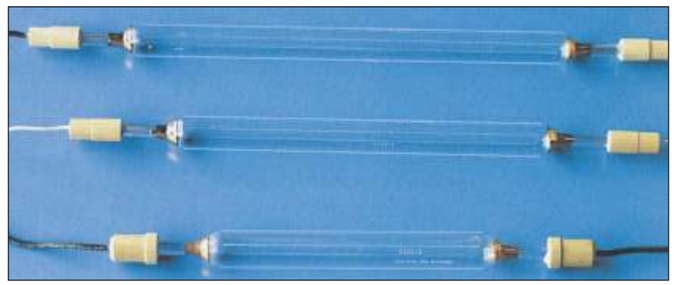
UV Curing technology in early 1960's started commercialising all around the world and since then it's been accepted and explored in various industry, whether we talk about giving objects all together a dignifying look or using it as a catalyst in various kinds of production techniques. One of its applications revolutionised many industry which is phrased as "3D UV Curing". UV curing from the very beginning has always been an interesting and quiet optically challenging for the manufacturers of UV systems.APL has been successfully able to simulate the UV curing systems in a way that complex three-dimensional parts such as automotive lighting assemblies, plastics moulded parts (like mobile phone cases, wood products, golf balls, etc), fibre glass composite parts, etc are fully polymerised (UV cured) by providing sufficient amount of UV energy to the coated product. It was also important that the end user and the machine is both safe from UV technology so we have made it quiet safe and user friendly for all the people associated with system. It has been rooting itself in various APPLICATIONS like:-

Applications

Headlight Lenses	Molding
Reflectors	Furniture
Bumper Guards	TV Cabinets
Hoods	Watches
Wood Cabinets	PVC Profile
Doors	Helmet
Frames	Golf Balls

UV Curing Lamps

We are one of the biggest Importer of UV Curing & Metal Halide Lamps. We got a variety of UV Lamps from 4" to 70" in power range of 200 w/inch to 600 w/inch.



DIGI UV SYSTEM

DIGI UV Machine is a dedicated machine for UV Coating and Curing on Digital prints. Digital printer using HP, Canon, Xerox, Kodak, Ricoh or any other digital press can make the best use of this machine for UV. This machine is very good for making Digital Photo Albums. Offset and screen PRINTERS can also use this machine for full coating UV Jobs.

Features:

- Feather touch display (Next generation UV controller).
- Machine Speed MPM (Meter per minute).
- Digital Current Display.
- Digital sheet counter.
- UV intensity management (25%, 50%, 75%, 100%)/ Hibernation mode.
- Auto Lamp off on lifting of Hood
- Efficient thermally controlled system.
- Lamp intensity synchronized with the speed.
- In case of error, it will display an error message on screen.
- After starting of the Machine, it will give signal for ready use or lamp ready.
- Lamp will be off in case of Paper jam.
- Lamp will be off in case of Belt stop.
- Interlocked between Lamp, Blower, and Conveyer.
- Varnish Pump on auto mode.
- User friendly setting of varnish flow.
- Texture Roller can be used.
- For Aqueous and UV, Separate tanks are possible (Optional).

Sizes Available

- 20" & 25"