SIASPRINT MULTIGRAPHICA
TECHNICAL SPECIFICATIONS & BENEFITS

A. Streamline chassis = less floor space. All electrical components integrated into the machine. No Electrical Cabinets separately lined up outside the machine's floor plan to take up valuable production work areas. Extremely sturdy/durable welded (solid and tube) steel structures on each side and full base flooring.

B. The infeed/load system is equipped with an ascending and descending gantry system that offers 3-point adjustable registration guides and choice of left or right side locators for double-sided work. The new infeed design allows easy substrate or material loading from the front end of the machine onto the vacuum print table(s) and a user friendly touch panel interface for operating control.

C. Each vacuum controlled print table is a special aircraft design (honeycomb) construction offering long life, planarity, stability, lightweight and low mass characteristics for rapid transport without backlash. The substrate is securely held in a fixed position via vacuum as it travels through each subsequent print and UV curing station and ready for manual or (optional) automatic unloading at the end of the line from the outfeed section. At each print station the vacuum tables are mechanically locked on all 4-sides for close tolerance registration. All vacuum tables are transported on smooth gliding sealed linear bearings, servo-driven via a toothed belt system assuring quiet operation and concise mechanical repeatability.

D. The printing head is a four post design with heavy duty steel lifting columns and a self balancing system. High lift position for easy access to the screen, inspection and adjustable controls. Accessible special housing for all motors, gearboxes, peel-off apparatus and other mechanical components without any interference during setup.

E. Rotating squeegee and floodbar assembly from an angled vertical print/flood position to a horizontal position allows one person to easily snap in and out for quick setup. A neutral position for the squeegee and flood bar carriage allows travel back and forth along the screen without touching the fabric, another useful aid in setting up the job. The squeegee and flood bar carriage is driven by a toothed belt instead of a roller chain. This offers a smoother, quieter operation and requires less adjustment.

F. Screen loading & unloading. With the push of one button on each print station the print head will rise slightly and the frame locks will be released allowing the operator to remove the screen.

G. Job completion sequence. On the main control panel only there will be a "Tear down" button. This function will allow the operator to select all heads or selected heads to be positioned and unlocked for rapid change-over or tear down after the job has been completed.

H. Motorized registration on each print station. This system is an advanced registration control that facilitates quick and accurate adjustments. Micro registration adjustments in the X, Y, and Z axis (skew) are carried out either at each individual print head or from the touch panel interface located at the outlet station.

SIASPRINT SERVICE S.r.l.
Uffici Amministrativi: via Lucini 21 – 20125 MILANO (MI) ITALY
Tel. +39 02 93796383 – Fax + 39 02 93790232 – staff@siasprint.it
Sede Legale: via Lucini 21 - 20125 MILANO – ITALY Cap.Soc. €10.000 i.v.
P.IVA e Cod. Fiscale 05070120968 – Iscr. Reg. Imp. Milano 05070120968 – R.E.A. 1794725

I. Frame loading from the operator side of the line, for smaller frame sizes adjustable frame holder rails can be easily moved into position. Includes 3-point frame positioning and pneumatic frame locking.

J. Adjustable blowback feature on each print table offers an air cushion for the reversal of vacuum at the end of the line from the outfeed section for fast removal of difficult to handle printed substrates.

K. The Sincroprint (peel-off) is motorized, height and the rate of peel as well as the starting point is adjustable from the control panel located at the individual print stations.

L. ECO PLUS UV Curing System – conserving energy costs: - Stationary UV Curing with rotating reflectors at 180° on the smaller sizes and scanning on the largest size. The system includes one lamp housing where one or two reflectors depending model are integrated with one or two lamps, variable stepless output 0 – 120 w/cm (300 w/inch). Optional 360 w/inch output are available.

- The life of all UV lamps is continuously monitored. It is composed of a UV-ray reading system that alerts the operator when a lamp becomes old and UV output decreases below the security level. The PLC then indicates on the touch panel interface, the lamp status and need for lamp replacement. This monitoring system avoids UV curing by guessing and ensures that the specifications of the ink supplier can be accurately met at all times. A useful tool designed to control and verify quality standards and/or achieve ISO Certification.
- The reflector(s) at the end of the given curing length stroke rotate 180°. The lamps are now facing the upper part of the housing. The Exhaust motor and fan are located along the side of the lamp housing. The cooling system assures proper lamp temperature and minimizes any heat transfer to the printed substrate, vacuum table and internal components. When the reflector is rotated in upper position, the lamp automatically goes into Standby mode (10 % of power setting). The PLC automatically sends a signal to the Exhaust motor to adjust the blower speed lower proportionate to 10% Standby mode. This function creates further energy savings with less shop air consumed. Lower and Adjustable Exhaust Air for each UV Section minimizes energy resources in a climate controlled facility. Energy cost are a continual ongoing expense directly related to operating cost and this savings combined with lower BTU's for heating and a/c tonnage for cooling offers a cumulative energy cost reduction.
- When the next sheet arrives in the curing position, the lamp resumes selected power, the reflector rotates and the vacuum table passes under the lamp or scanning UV cycle begins depending on model.
- A quartz filter positioned under the lamps allows the guarantee of cutting off a large percentage of the IR output which is a component of UV light emission. Less heat transferred and no shrinkage on the material. The quartz filters do not allow any substrate to come in direct contact with the lamps. No need for quick access doors to remove sheets required for fire extinguishing.
- Louvered reflector housing design to maintain cool lamps, reflectors, quartz filters and all electrical connection to lamps. Nearly ambient temperature even when running the line multiple shifts.

- The all new UV Eco Plus system saves up to 50% or more energy cost compared to other UV curing systems on the market.

- Energy consumption is associated with environmental impact with growing concerns about "green initiatives" and conserving energy, printing companies are looking for ways to reduce their carbon footprint and save money at the same time.

M. The new Multigraphica is even more user friendly than its predecessor. All adjustments are controlled with the user friendly touch panel interface and controls at each print station. These adjustments include but are not limited to; - Amount of vacuum and blowback.

- Print table speed.
- Off-contact adjustment.
- Sincroprint adjustable peel-off.
- Screen registration and adjustment in the X, Y and Z axis.
- Squeegee and floodbar height adjustment.
- Squeegee and floodbar angle adjustment.
- Squeegee and floodbar stroke length adjustment.
- Squeegee and floodbar speed adjustment.
- Stepless UV output, scanning speed and stroke length including start and stop position according to print area for largest model only.
- Stepless UV output 0 – 120 w/cm (300 w/inch) or optional 360 w/inch
- 10% standby power (minimizes energy cost)
- Longer UV lamp life and soft start without electrical (current) peaks.
- Electronic control system, regulates the UV output power and offers instant on/off control to maximize energy savings.

N. New HD squeegee and floodcoater assembly. Pneumatic actuators are arrayed along the length of the squeegee to ensure that pressure can be properly balanced. Each pneumatic actuator is controlled independently with center point balance to provide consistent and precise dot control while maintaining an even ink film layer.

O. A Modem is provided enabling remote monitoring and adjustment of all PLC controlled functions.

P. Advanced PLC technology replaces the need for many mechanical parts. Simplifies periodic maintenance and reduces downtime.

Q. Optional automatic stacker: This line can be supplied with an automatic pick and place sheet stacker. Automatic self lowering of the pallet is controlled by a photocell.

Technical Data	Model	76x105	100x140	122x162	122x210
Max Print Area	mm	760x105	1000x1400	1220x1620	1280x2100
Max Stock/Vac Area	mm	760x105	1000x1400	1220x1620	1280x2100
Max Frame Thickness	mm	40	40	40	50
Substrate Thickness	mm	Up to 50 mm			
Screen fine Tuning X-Y-Z	mm	+/- 10 mm			
Speed*	Cycles/hr	650	600	550	500
UV-Power Output	Stepless 0–100 % Std 0-120 w/cm Optional 160 w/cm				
UV-Standby mode	Standby 10% of output setting				
Control	PLC/Programmable Touch Panel Interface				
Colors	Fully modular 2, 4 & 6 or more				
Electrical Conn.	400V, 415V, 460V, 600V (other voltages available)				
Compressed Air	6 bar (84 PSI)				
Exhaust air UV	Adjustable 4000 cm/h				

NOTE: Exhaust Air motor(s) linked to PLC, automatically reduce proportionately to accommodate 10% Standby mode. Less exhaust necessary for 10% Standby, conserves make up air and ensures that energy resources are absolutely minimized.

All Technical information is not binding and subject to change.
* Mechanical machine speed w/o feeding operation.
+Max frame OD can be sized larger in the width dimension, consult with SIASPRINT.

Experience = over 300 Multicolor lines in production worldwide. More multicolor inline machines built by SIASPRINT than all the competitors combined.

SIASPRINT SERVICE S.r.l.
Uffici Amministrativi: via Lucini 21 – 20125 MILANO (MI) ITALY
Tel. +39 02 93796383 – Fax + 39 02 93790232 – staff@siasprint.it
Sede Legale: via Lucini 21 - 20125 MILANO – ITALY Cap.Soc. €10.000 i.v.
P.IVA e Cod. Fiscale 05070120968 – Iscr. Reg. Imp. Milano 05070120968 – R.E.A. 1794725