# STRAIGHT TO INNOVATION



#### FRAME SYSTEM

Screen holder bar. For smaller screen sizes the support bar (rear side) is pneumatically locked and movable. A special drive system allows movement from the operator side, the bar moves parallel to the front bar without jamming. No need of a second operator on the opposite side.

# JOB COMPLETION SEQUENCE

On the main control panel there is a "tear down" button. This function allows the operator to select all heads to be "turned down" after the job has been completed. Screen registration, off contact, peel off, vacuum zone, vacuum and blowback value, squeegee and floodbar speed, UV scanning stroke length, speeds and UV lamps power setting will go automatically to zero position.

# **DATA STORING**

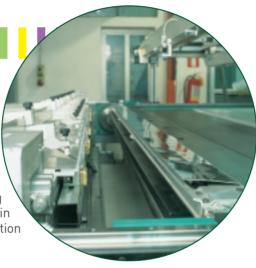
All setting values can be stored in a label and recalled for repetitive jobs.

# **VACUUM ZONES**

For better sheet tension the vacuum area is sectioned into two or three zones (depending on size) and is activated from the main control panel. Vacuum zones can be placed according to the material flow: on the centre line or aligned to the right or left side of the press. The corresponding fibre optics for sheet register control (two on the front, one on the side puller) will be activated automatically. Vacuum and blowback is fully adjustable.

# **GRIPPER**

To provide image to sheet register, at both feeding and printing position each gripper is automatically registered by a secure mechanical system that guarantees perfect location: moreover the patented spring loaded connection to the chain ensures precise, smooth registration without chain stretch and wear.



#### **USER FRIENDLY OPERATION**

We achieve maximum flexibility of all operator settings.

All necessary adjustments for set up are accessed via the touch screen and all data settings are visually controlled on the view panel.

- Vacuum zones
- Vacuum and blowback volumes
- Fibre optics for sheet register control at feeding position
- Grippers speed
- Off contact (snap distance)
- Synchroprint (peel off)
- Screen register adjustment x, y and z (skewing)
- Pneumatic squeegee pressure (equaliser)
- Squeegee and floodbar height adjustment
- Squeegee angle
- Squeegee and floodbar stroke length
- Squeegee and floodbar speed
- UV scanning stroke length speed power

# **NO PULLER / PUSHER**

Another development on the New Multiformula that improves the performance, print quality and easy operation: automatic side sheet register without the traditional mechanical puller/pusher (patent pending) This is a new important step that complete the already innovative feeding system. The sheet positioned, on manual or automatic feeding mode, at the front register (disappearing lay stop) is detected by fiber optics that control the perfect alignement.

A pneumatic device lock the sheet on the shuttle bar that bring the sheet into the waiting gripper of the press. During the run the shuttle bar controlled by a stepper motor, moves also crosswise until the side edge of the sheet (LH or RH) is detected by a fiber optic sensor placed underneath, by this system the shuttle feeding bar set the material directly into the gripper perfectly registered. Side fiber optic sensor has an adjustable position according to the material size.

"No Puller" system means a lot of advanteges that can be summarized, between the most important:

no misalignement of the sheet on the front register position caused easily by the traditional side mechanical action of the puller ,

- no adjustement at all using any kind of material: from light polyester to heavy cardboard or plastic up 7/8mm thickness.



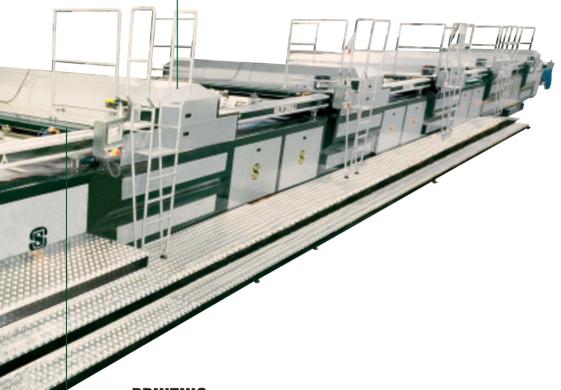
**Diagnostics** – the software controls possible faults on the line and gives clear indications to the operator regarding the type of defect and location directly on LCD.

**Data storing** – all setting values can be stored on a label and recalled for repetitive jobs.

**Modem** – a modem system is provided and located in the main control console. This allows our software engineers to monitor, from our factory, all line functions, control problems and remove the fault. Moreover it is easy to modify or upgrade the software.

# **DRYING**

At the end of the given cutting stroke, the reflectors rotate by 180°. UV and IR radiation is now directed upwards. At the top of the lamp housing an exhaust duct with fan is located. Optimum cooling of the lamp terminals and reflectors are guaranteed and there is no heat transfer to the inside of the dryer. The vacuum table remains cool. When the system is rotated to the up position, the lamp automatically cuts to standby mode (approximately 50w/cm). When the next sheet arrives in curing position, the lamp reverts to its set power the reflector turns and the scanning cure starts. The operator sets, at the touch panel, the curing stroke length according to material width and to the vacuum zones setted. Quartz filters are located under the lamps and guarantee to eliminate part of the infrared heat which is a component part of UV light emission. The quartz filters also prevent any contact between the printed material and the lamps, virtually eliminating fire risks inside the dryer module. Moreover no dust on the lamps and reflectors.



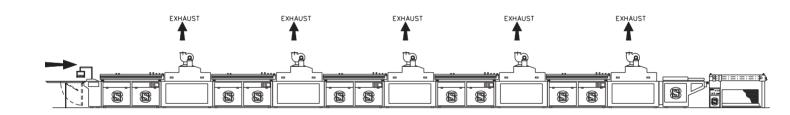
## **PRINTING**

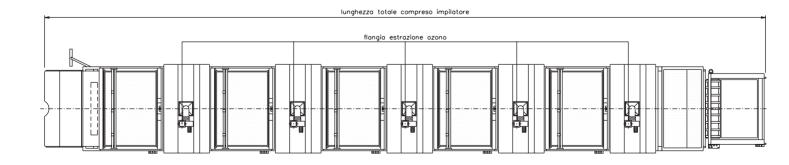
This patent pending system enables squeegee and floodbar changes from one side of the line, no need for a second operator on the opposite side of the press. Just slide the squeegee and floodbar into the holder sliding system which is in a completely open and accessible position. Changeover is achieved speedily and without effort by on operator. Motorised height, squeegee and floodbar angle, pneumatic squeegee pressure equaliser: again directly controlled from the touch panel, all simple and easy adjustments. Sequence for screen changing programme: park position will be activated, squeegee and foodbar housing rises and moves automatically over the stationary drip tray located at the end of the printing stroke and screen locks released, all with the push of one button on each individual head.

#### **MULTIFORMULA - TECHNICAL DATA**

TECHNICAL DATA	MODEL	150x180	165x215	165x265	165x325
Max Print Area	mm	1500x1800	1650x2150	1650x2650	1650x3250
	inch	59x71	65x85	65x104	65x128
Max Stock Area	mm	1550x1850	1700x2200	1700x2700	1700x3300
	inch	61x73	67x87	67x106	67x130
Max Frame OD	mm	2080x2200	2400x2550	2400x3350	2400x3840
	inch	82x87	94x100	94x132	94x151
Max Frame Thickness	mm	50	50	60	60
	inch	2	2	2,4	2,4

OVERALL DIMENSIONS	MODEL	150x180	165x215	165x265	165x325
Five colors	mm	29838	32875	32875	32875
	inch	1175	1294	1294	1294
Four colors	mm	25260	27789	27789	27789
	inch	994	1094	1094	1094
Two colors	mm	16104	17617	17617	17617
	inch	634	694	694	694
Single color	mm	11526	12531	12531	12531
	inch	454	493	493	493
Overall width	mm	2885	3235	4040	4640
	inch	114	127	159	183
UV Section + Print	mm	4578	-	-	5086
	inch	180	-	-	200





Due to SIASPRINT policy of continuous improvement all technical information for the machines illustrated in this brochure are not binding and subject to modification without prior notice.

