

Printing Simulator - SIR H/S

Heatset

Offset

The heatset simulator models a 4-color press from the paster to the folder along with its plates, blankets, ink and paper. The interactive software works like an airplane simulator and is so effective that its users feel that they are "virtually printing" — the only difference is that there are no paper, ink or press costs. Production problems of varying complexity can be created to suit all staff levels. The real results are improved operator skills and higher productivity.

Software runs on standard multi-media PCs preferably equipped with two monitors. One monitor displays the press, its control console and its mechanical parts; the second shows the printed copy and proof.



Press console monitor

Controls the entire press line from loading paper rolls to folder delivery. It allows all functional settings to be made and adjusted. Icons on the press console display the printed page, its proof, and access tools. The operator can check the press and the status of its variable settings. An interactive diagnostic self-help identifies possible problems along with explanations and solutions.

Print copy monitor

Lets the operator compare differences between the "printed form" and the "proof" copy. A magnifier allows close-up sheet inspection and verification of registration. The print copy has a colour control strip which can be checked with both the magnifier and densitometer to assess gray balance, dot gain, slurring, density, trapping, plate exposure. Folds and other details can also be checked.

Virtual printing... real results : what users say

"Now people make mistakes on the simulator instead of filling the bins full of paper. Because our employees see that we place a big investment in their future, staff turnover has been exceptionally low."

VALASSIS COMMUNICATION

"Trainees can learn or sharpen their skills on all of the major issues, from press registration to ink and water balance. Using simulation is fast and very comprehensive. It gives our printers a lot of confidence"

RR DONNELLEY & SONS

Simulators help

- Develop efficient problem solving skills
- Reduce waste, make ready and running time
- Investment to increase staff productivity and continuity
- Build confidence, helps team building and understanding
- Reduce training time and maintain printing skills
- Structured skill enhancement and evaluation
- Best practice & knowledge transfer



The most realistic "hand-on" operating experience comes from installing the simulator software into a press console.



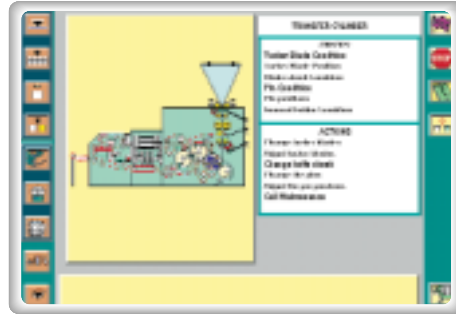
www.sinapsegraphic.com

Simulation & Software
for the Graphic Arts

Press



Press Adjustments



Blade cheek
Pins
Jaw cylinder
Jaws
Brushes
Tapes
Chopper

Table
Stripper
Brushes
Blade
Cheek
Creasers

Press Console



Web centering
Infeed tension
Emergency stop
Overall press speed
Master water level
Print unit controls (per color)
Water level
Overall ink flow
Ink key adjustments
Plate cylinder position

lateral circumferential diagonal (skew)
Dryer Temperatures
Chill Roll Overspeed
RTF tension
Former nose position
Cut-off register

Paster
Current reel
Reel core
Paper
Infeed web guide
Input scan cells
Infeed
Infeed roller
Infeed traction rollers
Printing unit(s)
Blanket
Blanket cylinder
Blanket packing system
Plate
Plate cylinder
Plate packing system
Inking system
Ink fountain
Ink fountain (duct) roller
Ink keys (metering screws)
Ink system rollers
Ink
Dampening (fountain) system
Dampening solution

Dampening rollers
Registration (buzzle) wheels
Dryer
Control sensor
Dryer zones
Dryer nozzles
Burners
Chill rolls
Chill cylinders
Chill traction rollers
Web guide (out)
Automatic register control
Output scan cells
Silicone applicator
RTF
Folder
Former
Nose
Blowers
Trolleys
Pipe rollers
Pinch (nip) rollers
Pinch rolls
Cutting cylinder
Knife
Transfer cylinder
Tucker blades

Potential Faults



Blistering
Bounce marks
Break at chopper fold
Chopper fold canted or shifted
Bounce marks
Circumferential slurring
Creasing after impression
Creasing before impression
Cut-off register
Dirt marks
Dog ears
Dot spread (enlargement)
Drying - Scumming
First parallel fold canted
First parallel fold shifted
Fluffing
Fogging

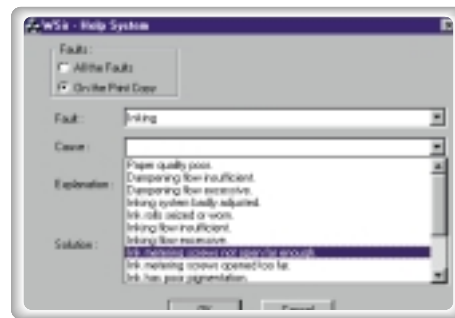
Folder jam
Front-back register
Gear marks (streaks)
Hickeys
Increased thickness
Inking
Lateral slurring
Off-center impression
Picking
Plate-roller marks
Registration
Smashed blanket (low)
Spotting
Tear at foot of signature
Tear at former nose
Tear at head of signature
Web break
Web edge (cut by blanket)
Wrinkling

Print Display and Analyses

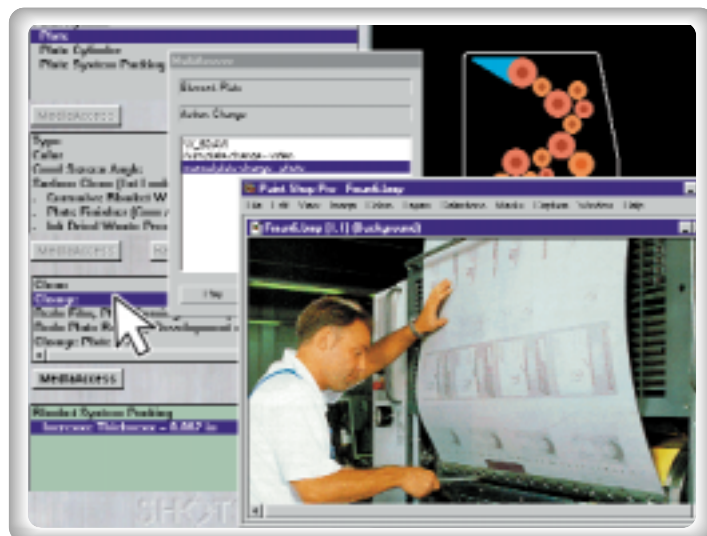


Display
Front 8 pages
Back 8 pages
Single page against proof
User help system
Tools
Magnifier
Densitometer
Display of folds
Production Info
Good & bad copies printed
Time & cost

Diagnostic Help System



Interactive diagnostics
Possible causes for current problems
Explanations
Solutions



Personalization Possibilities

Multi-media links (photos, videos, text)
Individual production costs
Creation of training courses
Custom "print copy form"



Sinapse Graphic International
Bâtiment Epicure - Les Algorithmes
Route de l'Orme aux Merisiers
91194 Saint-Aubin Cedex - France

info@sinapsegraphic.com
Tel. 33 (0)1 69 35 54 00

www.sinapsegraphic.com
Fax 33 (0)1 69 35 07 15