

6062 KELLS LANE, MILFORD, OH 45150 P: 513-831-2652 www.poppsusa.com

## 2006 OMEGA DIGICON "HS" SUITABLE FOR OPERATING OFFLINE WITH THE WEB STREAM 4000

Omega Digicon HS suitable for operating offline with the Webstream 4000 One Omega Unwind module complete with

- 76mm (3") air expanding unwind shaft.
- Auto tension control via electronic roll diameter sensing.
- Programmable auto end of roll slow down and stop.
- Brake release for easy thread up.
- Maximum roll diameter 700mm (28").

Electronic web guidance device with ultra sonic sensor to accurately steer the web throughout the converting section, complete with splicing table, pneumatically interlocked web clamps and tape dispenser.

Outfeed nip module with pneumatic pressure control, and dancer roller, which converts the web motion from fully rotary to a translative web motion.

Servo driven infeed nip roller assembly complete with dual pneumatically operated rubber nip rollers to ensure perfect web control.

One Semi Rotary Hot Foil Stamping station comprising of 25mm (1") air expanding foil unwind shaft; dancer assembly and nip drive to ensure smooth feeding of the foil; one 19" magnetic cylinder suitable for accepting Rotometrics "Uniflex" tooling; one re-circulating oil heating system with variable temperature control; one hydraulic "pressure on/off" with manually adjustable pressure front and back; one nip drive and dancer assembly for smooth foil feeding and rewinding onto 25mm (1") air expanding rewind shaft. The Hot Foil station incorporates "auto positioning" to ensure that the first impression is in perfect register. A photo electric cell continuously monitors the position of the print to foil to ensure perfect register.

The foil feeding device incorporates the Omega Systems "foil saver" which allows the foil to be indexed via the touch screen control.

Flexographic printing station includes

- Stainless steel ink pan with inlet and outlet ducting for constant level fluid control.
- Rubber covered squeegy roller with nylon side wipes.
- Ceramic anilox roller 200 lines per inch. 40 micron deep cells and 60<sup>o</sup> angle.
   (Alternative anilox cell structure can be supplied on request).
- Easily removable reverse angle doctor blade.
- One spot varnish plate cylinder designed to accommodate 1.7mm (0.067") flexo plates and 0.20mm (0.008") double-sided adhesive tape. (Alternative plate and tape thickness can be accommodated on request)

- One photo cell detector for ensuring perfect register of spot varnish / colour to the pre-printed web.
- One rubber covered varnish cylinder suitable for coating or varnishing a 330mm (13") web width
- One hard chromed impression roller.
- One plate cylinder mount.

Auto positioning of the Flexographic print unit ensures perfect register on the first impressions

The Flexographic printing station is designed to operate with UV cure flexographic varnishes with a semi rotary / translative or full rotary digitally controlled web motion. The plate cylinder for spot varnish is capable of printing various repeat lengths from 50mm (2") to 457mm (18"). The unit is supplied with a removable cartridge assembly allowing the complete printing section to be easily removed to aid cleaning.

The plate cylinder is located in the print head with a fixed pin and pneumatically operated cylinder for quick and easy removal / loading.

One rubber coated plate cylinder for pre-coating

A cross web adjuster of  $\pm$  10mm (3/8") allows the flexo plate to be cross-aligned with the pre-printed web. The servo driven plate cylinder ensures longitudinal register to the pre-printed web via photo electric sensor

One Hot Air Drier suitable for drying water based primers / varnishes. The dryer has an air flow of 300 cubic m/hour and maximum temperature at maximum air flow of 80°c.

One nip roller assembly

UV curing system model VCP 38-1 designed and manufactured by GEW Ltd and incorporating:

- Cold reflectors to minimise heat build up and maximises UV output.
- Cold shutter with advanced sandwich construction, eliminating heat build up to the web when stopping and starting.
- Removable cold filter for protecting ultra sensitive substrates.
- Unique cassette system, which offers instant access to lamp, shutter and reflector.
- Vari power touch screen with up to 21 automatic power levels to assure perfect adjustment of UV output of web speed – This feature gives complete control to the operator

One overlaminate rewind unit, complete with 76mm (3") air expanding rewind mandrel with pneumatic tension control and dancer roller for super varnish and cold foil rewind – Corona Treater is recommended in cold foiling on top of Indigo printed webs.

One semi rotary die cutting unit inclusive of a 482.6mm (19") magnetic die cylinder capable of cutting repeat lengths from 50mm (2") up to 457mm (18"). The flexible "wrap around" dies are easily mounted / removed to ensure quick change over from job to job. The variable hydraulic die cutting pressure can be regulated by the operator. The die pressure is disengaged pneumatically.

A cross web adjuster of  $\pm$  10mm ( $\pm$  3/8") allows the flexible die to be accurately aligned with the pre-printed web.

The combination of register mark sensor, encoder and servo drives ensures perfect print to cut register. The print to cut register is regulated using a register mark sensor to trace the web, an encoder roller for web speed and direct servo drive to the die cut and print cylinders. Die cut accuracy (dependant on accuracy of pre-printed web)  $\pm$  0.15mm (0.006")

One servo driven outfeed nip roller assembly complete with dual pneumatically pressured rubber nip rollers.

One waste matrix stripping unit with 76mm (3") air expanding rewind mandrel and variable tension control. A driven knurled capstan keeps tension of the matrix from the stripping roller.

A weighted lay-on roller ensures even build up of the matrix rewind to the matrix as it is rewound to ensure an evenly wound roll.

One scissor slitting assembly complete with driven infeed nip roller assembly. Quick release knife shafts and auto lift for ease of set up. 3 slitter knives are included with a manual cross adjust for on the run register adjustment of the slitting to pre-printed web.

One through beam label count sensor – to detect inter-label gaps.

One Semi Rotary Emboss Module.

One Corona Treater.

One RD Score Knife Assembly.

Two independent product rewind spindle air expanding 76mm (3") are fitted as standard (other sizes can be supplied upon request) and capable of winding label in / out and with variable tension control. The upper shaft for winding labels and the lower shaft for winding both labels and large roll diameter pre-coated webs

One touch screen operator interface panel with:

- Machine condition display.
- Parameter set up for all general machine settings and registration system.
- Machine alarms.
- Web transport mode.
- Label / length counter with pause option.
- Tension control etc.

Specification Digicon:

Machine type Omega Digicon
Machine handing runs right to left
Maximum web width 330mm (13")
Minimum web width 200mm (8")

Maximum machine speed:

Semi rotary mode 50m/min at 305mm repeat

Full rotary model (19" repeat) 90m/min Minimum machine speed 2m/min

Hot foil Specification:

Unwind shaft diameter foil 25mm (1") Rewind shaft diameter foil 25mm (1")  $\begin{array}{lll} \text{Max hot foil print repeat} & 457\text{mm } (18") \\ \text{Min hot foil print repeat} & 50\text{mm } (2") \\ \text{Cross adjust} & \pm 10\text{mm } (3/8") \\ \text{Max unwind roll diameter foil} & 150\text{mm } (6") \\ \text{Max rewind roll diameter foil} & 150\text{mm } (6") \\ \text{Max temperature of oil heater} & 220^{\circ}\text{c} \end{array}$ 

Hot foil magnetic cylinder repeat 482.6mm (19")
Hot foil plate thickness UNIFLEX 0.71mm
Make ready blanket including tape thickness 0.95mm

Flexo Unit:

Type Semi rotary

Cartridge type Open duct – removable

Anilox roller 200 lines / inch x 40 micron 60<sup>0</sup> angle

Doctor blade 15mm x 0.15mm carbon steel

Print cylinder 482.6mm (19")
Minimum repeat range 50mm (2")
Maximum repeat range 457mm (18")
Cross web adjustment ± 10mm (3/8")

UV Drying:

Type VCP 38-2 Lamp arc length 380mm (15") Lamp power up to 160w/cm

Die cutting unit:

Cross web adjustment ± 10mm (3/8")
Die cut cylinder repeat 482.6mm (19")
Minimum die cut repeat 50mm (2")

Maximum die cut repeat in semi rotary mode 457mm (18") Maximum die repeat rotary mode 482.6mm (19") only. Flexible die thickness to suit 480 micron air gap

Rewind unit:

Maximum rewind diameter

Upper shaft 350mm (14") Lower shaft 700mm (28")

Minimum diameter

rewind shaft 25mm (1")

Maximum diameter

Rewind shaft 76mm (3")

Maximum diameter

Rewind sleeve 150mm (6") Minimum slit width 15mm (5/8")

Maximum diameter of

Waste matrix 600mm (24")

Label counter label / feet / Metres

Power requirements: Electrical - machine

220v 60 hz 3 phase plus earth 63 amp/phase 220v 60hz 3 phase plus earth 32 amps/phase 6 bar 90psi 30 cfm UV:

Air requirements





