

INLINE DIGITAL PRINTING SYSTEM







Genesis, the start of new era in inline digital inkjet printing for medical and pharmaceutical packaging.

Prints at the highest resolutions while keeping pace with the industry's fastest packaging machines.



Genesis is an inline high-definition digital ink jet printer capable of printing on most medical device and pharmaceutical packaging substrates, including paper, Tyvek® and flexible films.

The inline Genesis Digital Inkjet
Printer is the perfect, high-speed
solution for printing package
graphics directly onto packaging
substrates. Genesis prints the
complete graphic, including any
variable information such as lot
number, expiration date, and all UDI
requirements.

What makes Genesis unique and affordable is that it prints across the web while the web is stopped. Traversing at up to 1,000

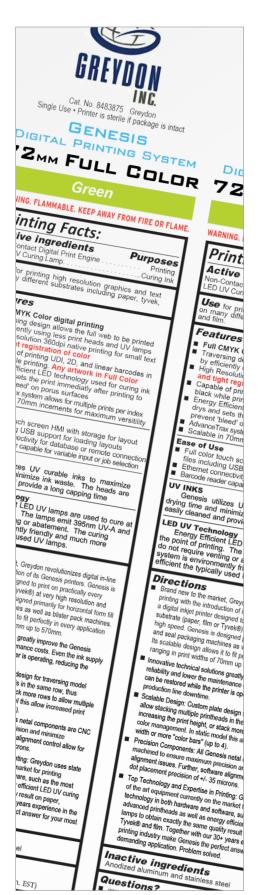
mm per second, and printing in both directions, Genesis can print 2, 3 or 4 times covering the entire width of the web as well as the complete index.

Genesis consists of 1, 2, 3, or 4 print heads. Each print head is 72 mm wide and prints up to 360 dpi. A high-speed, bi-directional traverse carries the print heads on the X axis and Greydon's Advanced Trax web management system moves the web in the Y axis to print as many

rows as necessary.

Genesis prints using UV inks. UV inks are stable and don't dry up in the ink jet heads, so the nozzles do not clog. A built-in LED lamp is traversed along with the print heads to immediately cure the UV inks while eliminating any bleeding, smearing, or distortion of the printed ink. Genesis can print in one color, two color or four color process. UV inks are the least costly of all digital printer technologies.





Genesis is designed to be installed on horizontal form/fill/seal packaging machines, as well as blister pack machines. Versatile mounting options allow seamless integration. Its scalable design allows it to fit perfectly in every application ranging in print widths of 70 mm up to 570 mm.

Scalable Design

Custom plate design for the traversing model allows stacking multiple print heads in the same row, thus increasing the print height, or stacking more rows to allow multiple color management. In the non-traversing static model, this allows increased print width or more "color bars" (up to 4).

Precision Components

All Genesis metal components are CNC machined to ensure maximum precision and minimize alignment issues. Software alignment control allows for dot placement precision of +/- 35 microns.



UV Ink System

Genesis utilizes UV-curable liquid inks supplied in 1L containers. Once cured, the ink becomes fully solid and will not leach or bleed.

A self-managing ink system automatically manages ink levels for optimum print quality. The ink



supply can be replenished while the system is operating with no loss of production or print quality.

LED UV Ink Curing Lamps

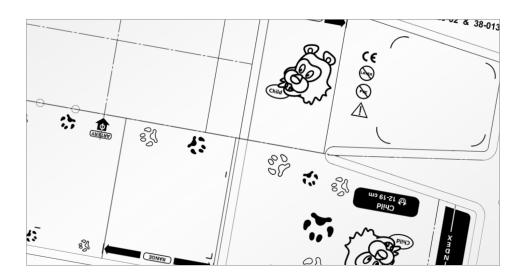
Genesis utilizes energy-efficient, instant-on LED UV ink curing lamps. The LED lamps require significantly less energy than traditional mercury curing lamps and due to their instant-on feature, are only activated when curing. This results in even better efficiency and longer life. The lamps are rated for 20,000 hours of operation without output degradation.

Superior software

Greydon provides label template design software which can be installed on a separate PC for template creation and management. As this software is also installed on the Genesis HMI, it can be used directly on the machine for local label creation and editing.

The software accepts many different types of artwork files and allows for manipulation, sizing, and variable data/barcode placement. Genesis offers full support for a multitude of barcode formats and fully integrates the GS1 standards for 2D UDI implementation.





Technical Specifications

	Traversing Head Model	Static Head Model
Print Width	72-140-210-280 mm	72 mm up to 560 mm
Color	Single Color, Dual Color, and Full Color CMYK	
Resolution	Up to 720 dpi Binary or Grayscale (7 levels)	
Print Speed	Up to 1,000 mm/sec	
Print Head Type	Digital Piezo Technology, 360 dpi native, 1,024 nozzles	
Drive Electronics	Proprietary	
Ink System	Passive Meniscus Control – Oil, Water, and UV Ink compatible	
Number of Print Heads	Up to 4	Up to 8

Custom Printers

Greydon can manufacture a Genesis Printer that meets your unique requirements and imprint size. Please contact us for more information.

Greydon: Expertise in Printing

30+ years of experience in the printing industry make Greydon and Genesis the perfect solution for your most demanding applications.

Contact the experts at Greydon for more information.

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