

CDI Advance Cantilever 1450 & 1750

Technical specifications



CDI Advance Cantilever 1450



CDI Advance Cantilever 1650

The CDI Advance Cantilever 1750 and 1450 address the highest quality flexo applications, primarily in the flexible packaging and folding carton markets. They enable high throughput by perfect ease of use and highest consistency. The CDI Advance Cantilever 1750 images digital flexo sleeves up to a sleeve length of 69" / 1750 mm, the CDI Advance Cantilever 1450 up to a sleeve length of 57" / 1450 mm.

Optionally the device can be equipped with an incorporated plate loading table, and a vacuum drum-sleeve with EasyClamp to securely hold down flexo plates of a size up to 50" x 80" / 1270 mm x 2032 mm for the CDI Advance Cantilever 1750 and of 42" x 60" / 1067 mm x 1524 mm for the CDI Advance Cantilever 1450.

Record speed with Optics 80

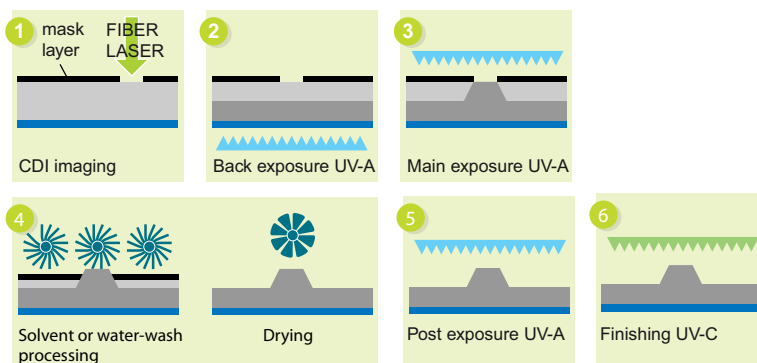
The CDI Advance Cantilever is the world's most advanced digital flexo imaging device. It features a record speed of up to 8.0 m²/hr (86 ft²/h) thanks to a high-reliability fiber laser with multibeam optics. The Optics 80 offers fully variable resolution imaging and seamless imaging of sleeves. The CDI Advance Cantilever 1750 images a full plate format of 50" x 80" / 1270 x 2032 mm in 19 minutes, the CDI Advance Cantilever 1450 a full plate format of 42" x 60" / 1067 x 1524 mm

plate in 12 minutes. This way they match the fastest plate processing equipment available in the industry.

Inline UV Main Exposure

Optionally the CDI Advance Cantilever 1450 and 1750 can be equipped with an Inline UV Main Exposure unit for main exposure of a sleeve or plate.

Imaging digital flexo plates and sleeves on the CDI



The digital flexo plate has a mask layer – sensitized to the CDI's laser light – on top of its surface. After imaging, this mask takes the function of the traditional film negative. Through the integration of the image carrier, a digital flexo plate has sharper image definition and steeper relief shoulders than conventional plates produced with film. Image deterioration by UV light absorption and scattering in the traditional contacting through vacuum sheet and film is totally eliminated. The CDI technology provides a major breakthrough in enhanced output quality and consistency, with reduced overall process cost.

Type of imager

- External drum design
- Sleeve capability:
 - › CDI Advance Cantilever 1750: max. sleeve length up to 69" / 1750 mm
 - › CDI Advance Cantilever 1450: max. sleeve length up to 57" / 1450 mm
- Cantilever air cylinder with automated tailstock for fast and easy sleeve exchange
- Solid granite machine base
- High power Fiber Laser source
- Class 1 Laser

Image quality

- Screen rulings: up to 250 lpi, depending on imaging resolution
- Halftone 1-99%
- Resolutions: fully variable on job-to-job base
 - › Standard Optics from 2000 to 2540 ppi
 - › HighRes Optics from 2540 to 4000 ppi

Engine control

Grapholas® on Intel PC with Windows 7. The input file format is LEN or TIFF, compatible with all CDI family members.

Productivity

Imaging times for digital flexo sleeves and plates at 2540 ppi

	Optics 15 (1.5m ² /h)	Optics 25 (2.5m ² /h)	Optics 40 (4m ² /h)	Optics 80 (8m ² /h)
Sleeve format 600 mm repeat x 1000 mm length (0.6m²)	12 min. (50% SuperSkip zones)	7 min. 12 sec. (50% SuperSkip zones)	4 min. 30 sec. (50% SuperSkip zones)	2 min. 15 sec. (50% SuperSkip zones)
CDI Advance 1750 Plate format Imaging time	50" x 80" 100 min.	50" x 80" 60 min.	50" x 80" 38 min.	50" x 80" 19 min.
CDI Advance 1450 Plate format Imaging time	42" x 60" 43 min.	42" x 60" 26 min.	42" x 60" 16 min.	42" x 60" 12 min.

Sleeves

- All digital photopolymer sleeves (Seamless and Plate-on-Sleeve)
- Sizes:
 - › CDI Advance Cantilever 1750: up to 69" / 1750 mm, 50" / 1270 mm repeat
 - › CDI Advance Cantilever 1450: up to 57" / 1450 mm, 50" / 1270 mm repeat

Plates (optional)

- All digital flexo plates or ablative film
- Usable plate thickness: 0.030" to 0.255" / 0.76 mm to 6.35 mm
- Sizes
 - › CDI Advance Cantilever 1750: up to 50" x 80" / 1270 x 2032 mm
 - › CDI Advance Cantilever 1450: up to 42" x 60" / 1067 x 1524 mm

Inline UV2 for plates and sleeves (optional)

Esko UV diode technology converts the UV Main Exposure from an uncontrollable analog process to a high precision digital process.

- Quality: excellent definition of dots and line work
- Consistency: highest consistency of exposure throughout the plate
- Controlled exposure: no changes in the distribution of the UV light due to aging

- Repeatability: equal quality from job to job and from plate to plate, respectively sleeve to sleeve
- Inline UV2 is a requirement for Full HD Flexo, Esko's innovative flexo solution for flexo without compromises.

The Full HD Flexo technology combines high resolution imaging at 4000ppi (HD Flexo imaging and screening technology) with digitally controlled main exposure inside the CDI (Inline UV2).

Machine dimensions

CDI Advance Cantilever 1750

- Width: 155.5" / 3950 mm
- Depth: 74.9" / 1903 mm
- Height: 54.4" / 1380 mm (cover closed) 70.7" / 1795 mm (cover opened)
- Weight: 7700 lb. / 3500 kg

CDI Advance Cantilever 1450

- Width: 143.7" / 3450 mm
- Depth: 74.9" / 1903 mm
- Height: 54.4" / 1380 mm (cover closed) 70.7" / 1795 mm (cover opened)
- Weight: 6600 lb. / 3000 kg

Installation requirements

- Separate vacuum system and exhaust unit are included
- Electrical: 3 x 400V/N/PE, 50/60 Hz, 2.9 kVA