

# Esko CDI Spark 5080

## Technical specifications



### Type of imager

- External drum design
- Drum sizes:  
Drum 5080 C (EasyClamp): max. plate format 50" x 80" / 1270 mm x 2032 mm or smaller
- Cast granite machine base
- High power Fiber Laser source, Class 1 laser

### Image quality

- Screen rulings: up to 200 lpi, depending on imaging resolution
- Halftone 1-99%
- Resolutions: fully variable from 2000 to 4000 ppi on job-to-job base

### Engine control

Grapholas® on Intel PC with Windows 2000.

The input file format is LEN or TIFF, compatible with all CDI family members.

### Plates

- All digital photopolymer plates or ablative film
- Usable plate thickness: 0.030" to 0.280" / 0.76 mm to 6.86 mm
- Sizes up to:  
42" x 60" / 1067 mm x 1524 mm or smaller  
50" x 80" / 1270 mm x 2032 mm or smaller

### Installation requirements

- Separate vacuum and exhaust system included
- No external compressed air supply needed
- No external water cooling is required
- Electrical
  - 230V/N/PE, 50/60 Hz, 2.9 kVA (imager)
  - 230V/N/PE, 50/60 Hz, 1.2 kVA (exhaust unit)

### Machine dimensions

- Width: 127.9" / 3250 mm
- Depth: 68.8" / 1750 mm (cover closed)  
74.4" / 1890 mm (cover open)
- Height: 74.4" / 1005 mm
- Weight: 6614 lb. / 3000 kg

### Productivity

Imaging times for DuPont Cyrel® digital flexo plates at 2540 ppi.

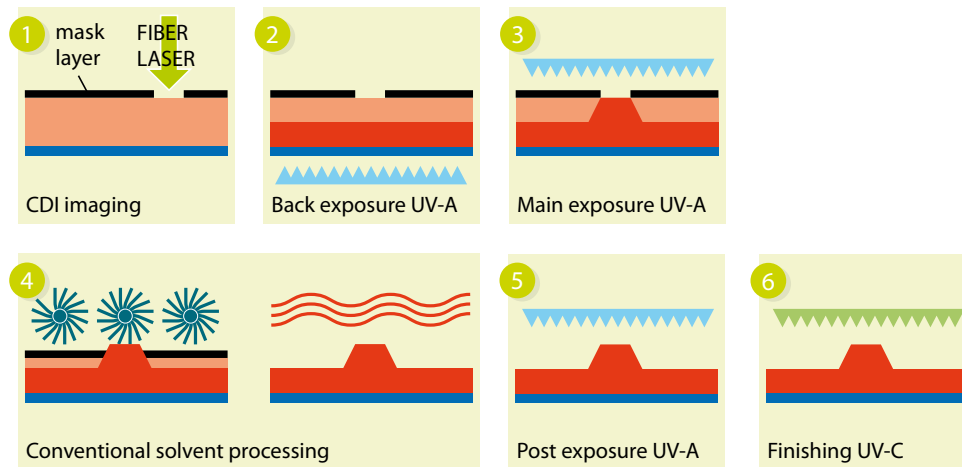
	Optics 15 (1.5m <sup>2</sup> /h)	Optics 25 (2.5m <sup>2</sup> /h)	Optics 40 (4m <sup>2</sup> /h)	Optics 80 (8m <sup>2</sup> /h)
<b>Plate format</b>	50" x 80"	50" x 80"	50" x 80"	50" x 80"
<b>Imaging time</b>	100 min.	60 min.	38 min.	19 min.

Productivity can differ due to media and job conditions.

The Esko Cyrel™ Digital Imager (CDI) is the first and most used laser imager for direct exposure on flexo plates. As a GATF and FTA award winner, it represents a great leap forward in digital flexography. CDI plates offer quality and printing stability that has so far only been achievable in offset or gravure. This provides business expansion from converting offset and gravure jobs to flexo. The Cyrel™ Digital Imager Advance addresses the highest quality flexo applications, primarily in the flexible packaging and folding carton markets, with inroads also in corrugated.

Four productivity levels are available for the CDI Spark 5080: Optics 15 (1.5m<sup>2</sup>/h), Optics 25 (2.5m<sup>2</sup>/h), Optics 40 (4.0m<sup>2</sup>/h) and Optics 80 (8.0 m<sup>2</sup>/h). The CDI Spark 5080 Optics 80 addresses the highest throughput needs, imaging up to 8.0m<sup>2</sup> of digital plates per hour. In just 12 minutes, it images a full size 42" x 60" / 1067 mm x 1524 mm plate of arbitrary thickness. Optionally the CDI Spark 5080 comes with EasyClamp, to securely hold down flexo plates of any thickness on the vacuum drum.

## The CDI images on Cyrel® and other digital flexo plates



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.