# CDI Spark Family



The CDI Spark family offers a wide range of digital flexo imagers for plates for different markets: from a small footprint imager to very large, for the tag and label, flexible packaging, small and medium folding carton to corrugated market.

You can choose and configure a CDI to match your current production needs, and expand capabilities as your business grows. The CDI Spark family can accomodate all plate sizes and you can choose any brand of digital plate and processing method.



# One single machine for all your media

Our market-leading machines can image digital (LAMS coated) flexo plates, digital letterpress plates (metal- and polyester-based), chemistry-free offset plates, digital silk screens and chemistry-free film.

- Digital flexo plates: DuPont, Flint, MacDermid, Asahi, Toyobo, Toray and others
- · Digital letterpress plates (metal and polyester based): Dantex, Flint, Toray, Toyobo and others
- Digital varnishing plates: Flint
- Chemistry-free offset plates: Presstek
- Film: PCI (Laserpoint II), Folex AG (LADF 0175)
- Rotary screen: Gallus Screeny



# Plate handling

- Integrated plate loading tables at all CDI models.
- Plate clamping drums at all CDI models.
- Optional: EasyLoad tables for safe and comfortable plate transportation.

# Automation for CDI Spark 4260 and CDI Spark 5080

With the Automation options, handling mistakes during plate loading will no longer cause plate losses.

Equipped with the **AUTO option**, the CDI Spark 4260 and 5080 load and unload plates automatically onto and off the drum. In combination with Inline UV Main Exposure and integrated Back Exposure it turns the CDI Spark 4260 and CDI Spark 5080 Auto into "plate factories".

The "Autoload" functionality for CDI Spark 4260 and 5080 offers fully automated plate loading and operator supported unloading.

## HD Flexo and Full HD Flexo

HD Flexo has set the new flexo printing standard for fine highlights, transition to zero, sharp text and brilliant image details. Full HD Flexo is adding perfect ink laydown with the right solid density, vibrant brand colors, supreme platemaking consistency and the only fully digitally controlled platemaking workflow available in industry.

Now flexo can compete with gravure and offset in flexible packaging, labels and corrugated printing applications.

### HD Flexo and Full HD Flexo benefits

- Smoother, sharper images with expanded tonal range
- Bright vibrant solids and a wider color gamut
- Supreme platemaking consistency
- Industry standard quality supported by major plate vendors





Become HD Flexo or Full HD Flexo Certified! HD Flexo and Full HD Flexo are the new standards for flexo quality. Companies that are HD Flexo / Full HD Flexo certified are among the best in their field. They can use the Certification seal in their communication.

## Inline UV

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

## The Inline UV benefits at a glance:

- Quality: excellent definition of dots and line work
- Consistency: highest consistency of exposure throughout the plate
- Controlled exposure: no change of UV light output over time (contrary to bank light systems where UV light bulbs are ageing)
- Repeatability: equal plate quality from job to job and from plate to plate
- Predictability: You know exactly what the result will be
- Extended lifetime: more than ten times longer lifetime compared to the analogue light tube technology
- Approved for solvent and thermal plates and sleeves
- Sustainability: Energy consumption for the Inline UV units is lower than for traditional UV exposure technologies

Esko's digital Inline UV main exposure allows to choose the dot shape per plate or sleeve: With the Inline UV1 setup round top dots are created offering the known dot shape compatible with the use of bank light tables. Thanks to the digitally controlled process, the dots are of highest quality and of perfect consistency all over the plate. The Inline UV1 exposure delivers plates with the most stable and sharp round top dots. With the use of HD Flexo, these round top dots print gradients down to zero; they also deliver much improved solid ink areas with almost no pinholes.

The Inline UV2 setup in combination with advanced HD Flexo screening (= Full HD Flexo) creates a unique dot shape that delivers the best highlight quality in combination with perfect solid ink lay down in all flexible packaging applications. Full HD Flexo also boosts corrugated printing due to fluting reduction. Furthermore, Full HD Flexo brings quality and consistency benefits to label printing by improving print consistency and highlight stability, and by reduction of gear marks.

## Availability

CDI Spark 2530, 4835, 4260 and 5080 can be optionally equipped with an Inline UV Main Exposure unit.





	CDI Spark 1712	CDI Spark 2120	CDI Spark
Type of imager			
Image quality	Image resolution 2540 ppi     Screen rulings up to 175 lpi     HighRes Optics available		
Engine control			
RIP & Screening options	<ul> <li>Imaging Engine 1712 included</li> <li>Industry standard PostScript/PDF RIP</li> <li>Quality screening optimized for flexo and letterpress included in the RIP</li> <li>HD Flexo option for the finest print quality in flexo</li> <li>Additional screening and proofing modules available</li> </ul>	Optional Imaging Engine 2120     Industry standard PostScript/PDF RIP     Quality screening optimized for flexo and letterpress (Circular, Double Circular dots) included in the RIP     HD Flexo option for the finest print quality in flexo     Additional screening and proofing modules available	Imaging     Industry     Quality     Double     Additior     available
Optics / Productivity	7.5 0.75 m²/h	7.5 0.75 m²/h  10 1.0 m²/h	7.5 0.75 10 1.0 n 15 1.8
Plates	<ul> <li>All digital flexo plates, polyester-base Letterpress plates and ablative film</li> <li>Usable plate thickness up to 0.12" / 3.0 mm</li> <li>Sizes up to 16.53" x 11.81" / 420 x 300 mm</li> </ul>	<ul> <li>All digital photopolymer plates, ablative film or polyester-base Letterpress plates</li> <li>Usable plate thickness: 0.030" to 0.100" / 0.76 to 2.54 mm</li> <li>Sizes up to 21" x 20" / 533 x 508 mm or smaller</li> <li>Letterpress optional  Magnetic drum with customized register pin system for digital steel-base Letterpress plates (sizes up to 21" x 20" / 533 x 508 mm or smaller)</li> </ul>	All digital polyester     Usable to 2.54     Size up 609 x 5      Letterpres     Magnet system (sizes up smaller)     Magnet base plates (sizes up smaller)
Machine dimensions	<ul> <li>Width: 33.85" / 860 mm</li> <li>Depth: 27.75" / 705 mm</li> <li>Height: 38.97" / 990 mm</li> <li>Weight: 661 lb / 300 kg</li> </ul>	<ul> <li>Width: 45.7" / 1160 mm</li> <li>Depth: 27.6" / 700 mm</li> <li>Height: 41.3" / 1050 mm</li> <li>Weight: 705 lb / 320 kg</li> </ul>	<ul><li>Width:</li><li>Depth:</li><li>Height:</li><li>Weight:</li></ul>
Installation requirements	Separate vacuum system and exhaust unit included     Electrical:     Imager: 230V/N/PE, 50/60 Hz     Exhaust: 90-250V/N/PE, 50/60 Hz; 1.2 kVA	Separate vacuum system and exhaust unit included     Electrical: Imager: 230V/N/PE, 50/60 Hz Exhaust unit: 230V/N/PE, 50/60Hz, 1.2 kVA	Separat included     No exte     No exte     Electrical Imager:     Exhaust



CDI Spark 2530



CDI Spark 4835



# External drum design with vacuum system and EasyClamp High power Fiber Laser source, Class 1 laser

- Screen rulings: up to 250 lpi, depending on imaging resolution
  Halftone 1-99%
  Standard Optics: fully variable from 2000 to 2540 ppi on job-to-job base
  HighRes Optics: fully variable from 2540 to 4000 ppi on job-to-job base (for Optics 15 to Optics 40)

Grapholas® on Intel PC with Windows 7. The input file format is LEN or TIFF, compatible with all CDI family members.				
Engine 2420 v standard PostScript/PDF RIP screening optimized for flexo (Circular, Circular dots) included in the RIP nal screening and proofing modules	Optional Imaging Engine 2530     Industry standard PostScript/PDF RIP     Quality screening optimized for flexo and letterpress (Circular, Double Circular dots) included in the RIP     HD Flexo option for the finest print quality in flexo     Additional screening and proofing modules available			
m²/h	7.5 0.75 m²/h	15 1.5 m²/h		
n²/h	10 1.0 m²/h	25 2.5 m²/h		
5 m²/h	15 1.5 m²/h	40 4.0 m²/h		
	25 2.5 m²/h	80 8.0 m²/h		
al photopolymer plates, ablative film or er-base Letterpress plates plate thickness: 0.030" to 0.100" / 0.76 mm to 24" x 20" / 08 mm (or smaller)  is optional c drum with customized register pin for digital steel-base Letterpress plates p to 24" x 20" / 609 x 508 mm or ic-vacuum drum for all digital polyesterates and steel-base Letterpress plates p to 24" x 20" / 609 x 508 mm or	<ul> <li>All digital photopolymer plates, ablative film or polyester-base Letterpress plates</li> <li>Usable plate thickness: 0.030" to 0.155" / 0.76 to 3.94 mm</li> <li>Sizes: up to 25" x 30" / 635 x 762 mm or smaller</li> <li>Letterpress optional</li> <li>Magnetic drum with customized register pin system for digital steel-base Letterpress plates (sizes up to 25" x 32" / 635 x 815 mm or smaller)</li> <li>Magnetic-vacuum drum for all digital polyester-base plates and steel-base Letterpress plates (sizes up to 25" x 32" / 635 x 815 mm or smaller)</li> </ul>	All digital photopolymer plates, ablative film or polyester-base Letterpress plates  Usable plate thickness: 0.030" to 0.255" / 0.76 to 6.35 mm  Sizes up to 48" x 35" / 1200 x 900 mm or smaller  Letterpress optional  Magnetic drum with customized register pin system for digital steel-base Letterpress plates (sizes up to 48" x 35" / 1200 x 900 mm or smaller)  Magnetic-vacuum drum for all digital polyesterbase plates and steel-base Letterpress plates (sizes up to 48" x 35" / 1200 x 900 mm or smaller)		
45.7" / 1160 mm 27.6" / 700 mm 41.3" / 1050 mm 705 lb / 320 kg	<ul> <li>Width: 68" / 1730 mm</li> <li>Depth: 37.8" / 960 mm (loading table closed)</li></ul>	Width: 82.2" / 2090 mm (up to Optics 40)     91.3 / 2320 mm (Optics 80)     Depth: 67" / 1710 mm     Height: 46.9" / 1190 mm     Weight: 2932 lb / 1330 kg		
e vacuum system and exhaust unit d rnal compressed air supply needed rnal water cooling is required al: 230V/N/PE, 50/60 Hz unit: 230V/N/PE, 50/60 Hz, 1.2 kVA	Separate vacuum system and exhaust unit included     Electrical:     Imager: 230V/N/PE, 50/60 Hz     Exhaust unit: 230V/N/PE, 50/60Hz, 1.2 kVA	Separate vacuum system, exhaust unit and external compressed air device included     External compressed air device supplied with the system     Electrical:     Imager: 230V/N/PE, 50/60 Hz     Exhaust unit: 230V/N/PE, 50/60Hz, 1.1 kVA     Air compressor: 230V/N/PE, 50/60Hz, 0.75 kVA		



CDI Spark 5080 / 5080 Auto



- · Optional Imaging Engine
- Industry standard PostScript/PDF RIP
- · Quality screening optimized for flexo (Circular, Double Circular dots) included in the RIP
- HD Flexo Screening option for the finest print quality inflexo
- Additional screening and proofing modules available



- All digital photopolymer plates, ablative film or polyesterbase Letterpress plates
- Usable plate thickness: 0.030" to 0.255" / 0.76 to 6.35 mm
- Sizes: up to 42" x 60" / 1067 x 1524 mm or smaller
- All digital photopolymer plates, ablative film or polyester-base Letterpress plates
- Usable plate thickness: 0.030" to 0.280" / 0.76 to 6.86 mm
- Sizes: up to 50" x 80" / 1270 x 2032 mm or smaller

#### **Spark 4260**

- Width: 110.2" / 2800 mmDepth: 43.3" / 1100 mm (cover closed) 65.8" /1670 mm (cover open)
- Height: 45.7" / 1160 mm
- Weight: 3968 lb / 1800 kg

#### Spark 4260 Auto

- Width: 122" / 3100 mmDepth; 113.8" / 2890 mm
- Height: 45.7" / 1160 mm
- Weight: 5500 lb / 2500 kg

#### **Spark 5080**

- Width: 127.9" / 3250 mm
- Depth: 68.8" / 1750 mm (cover closed) 74.4" / 1890 mm (cover open)
- Height: 39.5" / 1005 mm
- Weight: 5500 lb / 2500 kg

#### Spark 5080 Auto

- Width: 214" / 5435 mmDepth: 153" / 3885 mm
- Height: 39.5" / 1005 mm
- Weight: 6614 lb / 3000 kg

- Separate vacuum system, exhaust unit and external compressed air device included
- No external water cooling is required
- · Electrical:
  - Imager: 230V/N/PE, 50/60 Hz
  - Exhaust unit: 230V/N/PE, 50/60Hz, 1.2 kVA Air compressor: 230V/N/PE, 50/60Hz, 0.75 kVA
- Separate vacuum system, exhaust unit and external compressed air device included
- · No external water cooling is required
- Electrical:
  - Imager: 230V/N/PE, 50/60 Hz
  - Exhaust unit: 230V/N/PE, 50/60Hz, 1.2 kVA Air compressor: 230V/N/PE, 50/60Hz, 0.75 kVA

