



# TECHNICAL BULLETIN

## Digital Label Printing

### EDGE 850 - Frequently Asked Questions

#### EDGE 850 - General Information

##### 1. What is digital label printing?

This form of printing is when a digital graphic (PDF) is sent from a computer and the image is reproduced on the roll substrate being used.

##### 2. Why would I want to use digital label printing instead of flexographic printing?

The benefits of using digital printing over flexographic are as follows:

- No time and money spent producing plates
- No setup costs
- On-demand label printing – order what you need, when you need it
- Faster turnaround times
- Ability to print short runs
- Mass customization/personalization

##### 3. What is the price of the EDGE 850?

List price for the EDGE 850 is \$14,995 USD (FOB: Calgary, AB Canada). This price includes the label printer, feeder, rewinder, four starter toners (CMYK), and a starter roll of matte die-cut labels. The EDGE2Print software with 1 year of software upgrades is priced separately at \$499.00. Installation and training are not included. Contact [sales@decotechgroup.com](mailto:sales@decotechgroup.com) to request a formal quote or arrange a demonstration.

##### 4. What is the maximum print speed of the EDGE 850?

The EDGE 850 prints labels at speeds up to 30 ft/min (9.14 meters/min).

##### 5. How many labels can you print in a day? Printing

2up 4" x 6" (101.6mm x 152.4mm) labels:

4 Hours = 25,120 Labels

8 Hours = 50,240 Labels

##### 6. Can the EDGE 850 print on die-cut labels?

Yes, the EDGE 850 has the ability to print on die-cut, kiss-cut and standard rolls.

##### 7. Can the EDGE 850 print full bleeds?

Yes, but this needs to be done with discretion so no consumables are damaged in the process. The best way to print full bleeds is to use kiss cut material with "I-marks" or registration marks printed on the backing of the material. This ensures that there will be no contamination from excess toner being left in the gaps and alleys.

Another option is printing edge to edge on die-cut labels using the scaling feature in the EDGE2Print software. Using regular die-cut materials, the EDGE 850 can print edge to edge within 1 mm (allowance for movement on the x and y axis). To compensate for this, the scaling feature in the software can be used to extend that graphic and ensure all edges of the label are being covered in toner.

**8. Can the EDGE 850 print on clear label stock?**

For label printing on clear die-cut PET's and synthetics, an I-mark will be needed on the backing of the material in order for sensor registration.

**9. What roll widths can be printed on the EDGE 850?**

The minimum roll size is 6.0 inches (152.4mm) wide and the maximum roll size is 8.5 inches (215.9mm).

**10. What is the print width of the EDGE 850?**

The minimum print width is 6.0" (152.4mm) and maximum print width is 8.24" (209.3mm).

**11. What is the maximum input roll diameter?**

The maximum OD of an input roll is 8.0" (203.2mm).

**12. What is the maximum label size you can print on the EDGE 850?**

The maximum printable area for a label is 8.24" x 52" (209.3mm x 1320.8mm)

**13. What is the minimum die-cut label size you can run on the EDGE 850?**

The smallest die-cut label size is 1 inch by 1 inch (25.4mm x 25.4mm).

**14. What is the smallest font type that can be printed?** Our smallest recommended font size is 4 point.

**15. What's the resolution that can be achieved using the EDGE 850?**

The EDGE 850 prints at 1200 x 600 DPI which gives us 720,000 dots in one square inch. Now the Harlequin® RIP will raster the image in AM half toning which gives us 160 LPI over 720,000 dots in a square. This is the process of taking small dots and building up an image by grouping dots and colours together to create clean and crisp high resolution photo imaging.

**16. How long does it take to do a job changeover including changing the substrate?**

Job changeover takes approximately 1-2 minutes from job submission to loading the new substrate.

**17. Is unattended operation possible with the EDGE 850?**

Yes. Once the job is set up and the rewinder is started, the operator can leave and return when the job is finished.

**18. What kind of maintenance is required?**

With most digital label printers, there is standard replacement of the transfer belt, fuser, drums, toners and waste toner bottle.

**19. What is the service contract for the EDGE 850?**

1 Year on all non wearing parts. Consumable items are not included (toner, drums, waste toner bottle).

**20. What are advantages and disadvantages of LED versus Laser?**

LED technology has less moving parts which makes it more stable than Laser technology when it comes to continuous label printing. Laser uses a rotating mirror to lay down the scan which results in a longer laser beam to the outside edges of a print than to the middle. When you use this in a continuous printing the biggest issue is colour consistency throughout the job run. The EDGE 850 holds a very good Delta-E throughout the entire roll of media. Laser cannot do this.

## EDGE 850 - Media & Consumables

### **1. What is iSys Label Certified Media?**

iSys Label provides a variety of substrates that have been rigorously tested for optimal print quality, ease of use and consistency from the beginning of the job until the end. The EDGE 850 was designed and engineered to operate with approved consumables and certified media which ensure superior quality and resolution every time. iSys Label is not responsible for damage or consequences arising from the use of non-certified media or consumables.

### **2. What types of Certified Media can run on the EDGE 850?**

The EDGE 850 can print on a variety self-adhesive label and tag stocks in die-cut, kiss-cut and standard rolls. This includes, but is not limited to the following:

- Matte, semi gloss and high gloss papers
- Piggyback
- Fluorescents
- Textured wine stock
- Tag stock
- Foil covered papers
- Approved synthetics such as PET's, teslins, and vinyl's

### **3. Are there materials that the EDGE 850 cannot run?**

There are various substrates that cannot run on the EDGE 850. The issues listed below can cause problems with the image consistency and potentially damage the printer's consumables. Based on observations, the following serve as potential areas of concern when running materials that are not on the iSys Label Certified Media List:

- **Static:** Materials such as polypropylenes may carry a static charge when running through the EDGE 850, resulting in dispersion of the toner and an inconsistent image.
- **Metalized Substrates:** When running substrates with a metalized facestock there is an internal charge that is created and results in dispersion of the toner. This will create an inconsistent image with areas of toner dropout.
- **Coatings on the facestock:** Coatings on the facestock such as thermal transfer may cause the toner not to adhere to the surface or cause image consistency problems such as toner dropout
- **Heat sensitivity of the material:** The heat from the fuser will cause materials such as polyethylene (PE) and polystyrene (PS) to melt or shrink, resulting in damages to the fuser and drums.

iSys Label and DECO TECH are not responsible for damage or consequences arising from the use of non-certified media or consumables.

### **4. Can the EDGE 850 do cut-sheet labels?**

No. iSys Label does not support cut sheet label printing.

**5. Will all materials be available in die-cut rolls?**

Yes and no. Some substrates are not capable of running through the printer when die-cut because of the inability of the gap sensor to detect the difference between the edge of the material and the label backing. One such example is trying to print clear PET die-cut labels. This is not possible with a regular die-cut roll, *however* if an I-mark is printed on the backing of the liner when being converted and the back sensor is enabled, the end user will be able to print die-cut labels using clear PET. Contact your Media Representative for more information.

**6. Why do different substrates run at different speeds?**

The different print speeds are based on the type of media, the thickness and the heat sensitivity of the material. For example, a thicker tag stock will run slower than a 1mil PET due to the absorption of heat across the material while ensuring the toner fuses to the material.

**7. What roll widths can be printed on the EDGE 850?**

The minimum roll size is 6.0 inches (152.4mm) wide and the maximum roll size is 8.5 inches (215.9mm).

**8. What is the minimum and maximum thickness of media you can run on the EDGE 850?**

The EDGE 850 can print a minimum thickness of 0.006 inches (0.15mm) and a maximum thickness of 0.010 inches (0.254mm).

**9. What is the typical length of media on a roll for the EDGE 850?**

Depending on the type and thickness of material on a roll, there is approximately 700 ft ± 5%.

**10. How much media wastage is there at the beginning and end of a job?**

Using stop and cut, there is 24" (609.6mm) at the beginning of the job and 54" (1371.6mm) at the end. Using cut on the fly, there is 24" (609.6mm) of waste at the beginning of the job and approximately 10" (254mm) of waste at the end of a job. There are two reasons for there to be excess material at the beginning and end of the job. The extra material at the beginning of the job is because the optical sensors are syncing up with the gaps and the excess material at the end allows for the rolls to be threaded onto finishing equipment.

**11. How do I get material tested?**

Please send an email to [candice\\_kulcher@isys-label.com](mailto:candice_kulcher@isys-label.com) with your request.

**12. How many colors of toner does the EDGE 850 use?**

The EDGE 850 is a digital label printer that utilizes CMYK toners (1 of each).

**13. Are white toner and/or spot colors available?** There is currently no availability of white or spot colors.

**14. What does the toner cost?**

Please contact your DECO TECH sales representative for toner costing.

**15. What is the life of the consumables?**

Toner: CMY – 11,500 pages @ 5%

Toner: K – 11,000 pages @ 5%

Drums: CMYK – 30,000 pages @ 5 %

Fuser: 60,000 pages

Transfer Belt: 60,000 pages

**16. Where can I purchase consumables from?**

Consumables are purchased from DECO TECH directly. We stock a full range of consumable goods for the EDGE 850 label press.

**17. How scratch and abrasion resistant are labels printed on the EDGE 850? What is their resistance when exposed to sunlight?**

Because we use a dry toner that needs heat to fuse the polymer to the substrate, we exhibit ultra-high fastening which leads to very high resistance to scratching. Labels are also quite water soluble and if printing on plastic, can be considered water proof. Our light fastening is approximately 6 months and with coating or lamination, can last over a year.

## EDGE2Print Software

### 1. What is the EDGE2Print software?

EDGE2Print is label printing software that was developed by iSys Label after finding other label making software packages too time consuming and cumbersome to use.

The EDGE2Print software has an easy to use interface and utilizes quick drag and drop imposition for effortless placement. Job setup and changeover can be done in 1-2 minutes, giving you the power to do more in less time.

### 2. What are the additional software features?

Some of the features included in the EDGE2Print software are as follows:

- Full color management
- Pantone® reproduction capabilities
- Mirror imaging
- Scaling for edge to edge printing
- Nesting based on the same sized graphics
- Standard imposition with drag and drop capabilities
- Snap grid for quick imposition on die-cut labels
- Coverage and Cost calculator (Per label, per job) with or without consumables & media
- Multi-up costing for different graphics printed on the same layout
- PDF job lists

### 3. What type of RIP does the EDGE2Print software use?

The EDGE2Print software utilizes a Harlequin® RIP.

### 4. Can color be adjusted in the RIP?

Yes, this can be done through ICC profiling.

### 5. Does the EDGE2Print software have the ability to reproduce Pantones®?

Testing done on the EDGE 850 has indicated that approximately 82% of Pantones can be reproduced in respect to the applicable color gamut for the substrate.

### 6. Can the EDGE2Print software do label costing?

Yes, the software can do toner and consumable costing per label with or without the media costs included.

### 7. Does the EDGE2Print software do variable data?

Yes, the optional software can print variable data in the form of variable text, bar codes, sequential numbering, batch codes, date codes, images, etc.

### 8. Is the software and machine Mac compatible?

No. Currently, the EDGE2Print software is only compatible with Windows 7 Professional or Ultimate 64-bit.



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