## EDGE 850 & EDGE 850 MP GHS Label Printer

## Frequently Asked Questions

## **General Questions**

#### 1. What is GHS and BS5609?

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) is an international system that was created by the United Nations and ensures global consistency for the labeling of dangerous goods.

British Marine Standard BS5609 is a requirement for self adhesive drum labels needing International Maritime Dangerous Goods (IMDG) certification for shipment. These standards set out various criteria for label durability when dangerous goods are being transported in marine environments. It stipulates that the drums and containers used to contain the hazardous goods, be durably marked and remain identifiable for at least 3 months being immersed in the sea.

## 2. What is a GHS BS5609-compliant label?

In order to print fully-compliant drum and chemical labels the facestock, adhesive and printed graphic all need to meet the requirements for sections 1, 2 and 3 of the BS5609 standards. In addition, the graphics of the labels must comply by utilizing the standardized black and red pictogram system accompanied with the precautionary text layouts. The EDGE 850 is GHS BS5609-compliant, meeting sections 1,2 and 3, being tested and certified in June 2014.

## 3. How is BS5609-compliancy achieved?

In order to achieve BS5609 certification, the printed labels were tested by Smithers Pira. British Standard BS 5609 stipulates that the drums and containers used to contain the hazardous goods, be durably marked and remain identifiable for at least 3 months being immersed in the sea.

Testing includes a 3 month exposure of labelled test plates in salt water at mid-tide. After this time frame, it is tested for the following:

- Print key effectiveness: resistance to print removal using adhesive tape
- · Abrasion resistance: legibility and contrast after rolling in a mixture of sand and artificial sea water
- · Permanence of print: colour fastness and residual contrast after exposure to artificial salt spray and sunlight

## 4. Do you know your deadline?

June 1<sup>st</sup>, 2016 is the final deadline for GHS integration. By this deadline, labels must show the necessary pictograms and follow the layout guidelines, SDS sheets must be updated, and employees trained for new processes.

### 5. Did you know you can print in a single pass?

The EDGE 850 roll to roll digital label printer is ideal for printing full color GHS BS5609-compliant chemical and drum labels on demand. Die-cut labels printed on the EDGE 850 deliver outstanding stability and resistance to water, chemicals, fading and smudges when exposed to the harshest of elements. With speeds upwards of 4.33m/min. the EDGE 850 will allow users to eliminate the need for ordering pre-printed labels, reduce inventory and wait times, and allows users to customize each label with variable information in full color - all in a single pass.

## 6. Did you know you can print individual labels?

The **EDGE 850 MP** is a roll to cut label printer. This label printer is also GHS BS5609 compliant and can be used for when individual labels are needed. Please ask a Label sales representative for more information on this product.

#### 7. Why would I want to use the EDGE 850/EDGE 850 MP instead of other compliant print solutions?

The benefits of using our print technology over other GHS BS5609 certified printers are as follows:

- You aren't limited by label size print label widths varying from 4" to 8.5" (101.6mm to 215.9mm)
- Roll to roll or roll to cut sheet capabilities
- On-demand label printing. Print what you need, when you need it.
- Variety of BS5609-approved materials from different suppliers
- Print full rolls in 30 minutes or less
- Dry toner based system
- Production level printer can be used 24 hours a day with very little downtime
- Print using our EDGE2Print software or our custom driver
- Mass customization/personalization capabilities using variable data software print everything from barcodes to lot numbers using the variable data options
- Custom driver allows user the ability to print using any enterprise software

## 8. What is digital label printing?

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

## 9. What is the price of the EDGE 850 and/or EDGE 850 MP?

Email <a href="mailto:ghs@isys-label.com">ghs@isys-label.com</a> for more information on special pricing. The price includes the label printer, feeder, rewinder, EDGE2Print software, 1 year of software upgrades, four starter toners (CMYK), and a starter roll of matte die-cut labels.

## 10. What is the print speed of the EDGE 850?

The EDGE 850 print speed depends on the type of GHS BS5609-Certified materials is being used. Polyester (PET) prints at 14.2 ft/min (4.33 meters/min).

## 11. How many labels can you print per day?

Printing 1 up, 8.25 x 11 inch (209.6 mm x 279.4 mm) labels:

- 4 Hours = 3,575 Labels
- 8 Hours = 7,150 Labels

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

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

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

Yes and no. iSys Label does not support cut sheet label printing from a tray BUT they are able to do roll to cut labels. Please ask a sales rep about the EDGE 850 MP.

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

The best way to print full bleeds is to use kiss cut material with I-marks printed on the backing of the material. An I-mark is needed on the backing of the material in order for sensor registration, allowing the printer to image in the correct location on the roll. By using kiss-cut material, it ensures there will be no contamination from excess toner left in the gaps and alleys, then re-desposited on the label.

## 15. What is the print width of the EDGE 850?

The minimum print width is 3.0" (76.2mm) and maximum print width is 8.24" (209.3mm).

## 16. What is the maximum input roll diameter?

The maximum OD of an input roll is  $8.0^{\prime\prime}$  (203.2mm) wide.

#### 17. 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).

#### 18. 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).

#### 19. What is the smallest font size that can be printed?

Our smallest recommended font size is 4 point.

#### 20. 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. 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. Please ask our team to see samples of the quality.

### 21. 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.

#### 22. 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.

## 23. What kind of maintenance is required?

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

## **EDGE 850 - Media & Consumables Questions**

## 1. What types of BS5609-compliant material can run on the EDGE 850?

iSys Label has partnered with leading substrate manufacturers' to provide users with GHS BS5609-Compliant label substrates. It is highly recommended you speak with your sales rep to establish the proper substrate per application.

## 2. Where can the GHS BS5609-compliant material be purchased?

GHS compliant label rolls can be purchased from Diversified Labeling Solutions (DLS) or DigiFlex Distribution, iSys-preferred partners. Their contact information can be found here: http://www.isys-label.com/media-converters/

## 3. 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.

## 4. What roll widths can be printed on the EDGE 850?

The minimum roll size is 3.0 inches (76.2mm) wide and the maximum roll size is 8.5 inches (215.9mm).

## 5. How many colors of toner does the EDGE 850 use?

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

#### 6. 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 pagesTransfer Belt: 60,000 pages

### 7. Where can I purchase consumables from?

Consumables can be purchased from your nearest distribution center. Please email ghs@isys-label.com for more information.

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

Die-cut labels printed on the EDGE 850 deliver outstanding stability and resistance to water, chemicals, fading and smudges when exposed to the harshest of elements. 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. Our light fastness is approximately 6 months when exposed to the direct elements. Labels were tested by Smithers Pira in order to achieve BS5609 certification, and therefore meet all requirements for section 1, 2 and 3.

## **EDGE2Print Software Questions**

### 1. What is the EDGE2Print software?

EDGE2Print is a full featured, easy-to-use software package that was developed exclusively for the company's short to mid run digital label printers. The EDGE2Print software enables users to drag and drop their label graphic, select the exact quantity needed and press print. By combining this short run digital label printer with the easy-to-use software, users can print their chemical or drum label on die-cut substrates and have the labels ready for immediate application that day.

Optional software for the printer is iVDP. Variable data software provides the user the ability to combine static and dynamic content to create varying multi-graphic labels containing variable text, images, barcodes, SKU's, and dates – making drum and chemical label printing that much easier.

## 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 based 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 and 8, Professional or Ultimate 64-bit.

## **EDGE2Print Driver Questions**

## 1. Why would I use the driver?

The driver is ideal for large-scale organizations where automation is needed for existing workflows and systems are already in place such as SAP, for example.

## 2. What environment does the driver need?

The driver can be installed on Windows 7 and 8, and Windows servers, both 32-bit and 64 bit systems. The driver is NOT compatible with Mac.

## 3. Can I create new media size in the driver?

No. Since label sizes are pre-set in the factory according to the customer's needs, there is no ability for the user to change the type and size of label being used. Please contact <a href="mailto:ghs@isys-label.com">ghs@isys-label.com</a> for more information on changing the sizes.

## 4. Can the driver print a multi-page file?

No, the driver will only print one page and the maximum length is 52".

## 5. Can I adjust the image location of the prints?

Yes. The driver offers vertical adjustment from -1/4" to 1/4" (-6.35mm to 6.35mm), jumping by 1/32" (0.79mm) and horizontal adjustment from -1/8" to 1/8" (-3.18mm to 3.18mm), jumping by 1/64" (0.4mm).

## 6. Can color be adjusted or managed in the driver?

No. The driver has no ability to manage color.

## 7. Can variable data be used with the driver?

No.