



## APEX 1290 - 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 APEX 1290?

Contact [sales@isys-group.com](mailto:sales@isys-group.com) for more information on pricing. This price includes the printer, feeder, rewinder, APEX2Print software, 1 year of software upgrades, four starter toners (CMYK), and a starter roll of matte die-cut labels.

### 4. What is the maximum print speed of the APEX1290?

The APEX 1290 prints at speeds up to 30 ft/min (9.14 meters/min).

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

Printing 3up 4 x 6 inch (101.6mm x 152.4mm) labels:

4 Hours = 37,680 Labels

8 Hours = 75,360 Labels

### 6. Can the APEX 1290 print on die-cut labels?

Yes, the APEX 1290 has the ability to print on die-cut, kiss-cut and standard rolls.

### 7. Can the APEX 1290 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 an I-mark 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 APEX2Print software. Using regular die-cut materials, the APEX 1290 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.

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.



**8. What roll widths can be printed on the APEX 1290?**

The minimum roll size is 3.0 inches (76.2mm) wide and the maximum roll size is 12.9 inches (327.7mm).

**9. What is the print width of the APEX 1290?**

The minimum print width is 3" (76.2mm) and maximum print width is 12.9" (327.7mm).

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

The maximum OD of an input roll is 12.0" (304.8mm).

**11. What is the maximum label size you can print on the APEX 1290?**

The maximum printable area for a label is 52 inches (1320.8mm).

**12. What is the minimum die-cut label size you can run on the APEX 1290?**

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

**13. What is the smallest font type that can be printed?**

Our smallest recommended font size is 4 point.

**14. What's the resolution that can be achieved using the APEX 1290?**

The APEX 1290 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.

**15. 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.

**16. Is unattended operation possible with the APEX 1290?**

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

**17. 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.

**18. What is the service contract for the APEX 1290?**

1 Year – Parts & Labor

**19. 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 APEX 1290 holds a very good Delta-E throughout the entire roll of media. Laser cannot do this.



## **APEX 1290 - 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 APEX 1290 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 APEX 1290?**

The APEX1290 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 APEX 1290 cannot run?**

There are various substrates that cannot run on the APEX 1290. The issues 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 APEX 1290, 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 to melt or shrink, resulting in damages to the fuser and drums.

iSys Label is not responsible for damage or consequences arising from the use of non-certified media or consumables.

### **4. Can the APEX 1290 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 APEX 1290?**

The minimum roll size is 3.0 inches (76.2mm) wide and the maximum roll size is 12.9 inches (327.7mm).

**8. What is the minimum and maximum thickness of media you can run on the APEX 1290?**

The APEX 1290 can print a minimum thickness of 0.006 inches (0.15mm) and a maximum thickness of 0.013 inches (0.33mm).

**9. What is the typical length of media on a roll for the APEX1290?**

Depending on the type and thickness of material on a roll, they are approximately 1200 ft (365.76m)  $\pm$  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 many colors of toner does the APEX 1290 use?**

The APEX 1290 is a digital label press and utilizes CMYK toners (1 of each).

**12. Are white toner and/or spot colors available?**

Yes, white toner is available.

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

Please contact your sales representative for toner costing.



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

Toner: CMY – 16,500 pages @ 5%

Toner: K – 18,500 pages @ 5%

Drums: CMYK – 42,000 pages @ 5 %

Fuser: 100,000 pages

Transfer Belt: 100,000 pages

Waste Toner Bottle: 100,000 pages

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

Consumables can be purchased from your nearest distribution center. This can be found by contacting [sales@isys-group.com](mailto:sales@isys-group.com)

**16. How scratch and abrasion resistant are labels printed on the APEX 1290? 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 fastness is approximately 6 months and with coating or lamination, can last over a year.

**17. Do you have a label material that will work outdoors?**

Polyester (PET) or vinyl media works great for outdoor applications and environments where a durable label is needed.

**18. What are some uses for the polyester labels (PET)?**

Some of the uses may include: mailing labels, shipping labels, routing labels, hazardous waste labels, product labels, barcodes, bumper stickers, glass labels, indoor labels, outdoor labels, signs, invitations, warranty labels, tag labels, wine bottles, oil drums, freezer labels, boat/car/truck/trailer labels, in addition to many other uses.

**19. What can I use fluorescent colored labels for?**

Fluorescent colored labels are designed to attract attention to the labels. Some possible uses include: Marketing, logistical labels, product labels, inventory control, perishable goods and materials, warning labels, etc.

**20. What can I use foil labels for?**

Foil media is suitable for indoor uses, and can be used when trying to achieve a metallic affect. By printing colors on a metallic surface, you can create the illusion of different metallic colors.

**21. What can I use textured labels for?**

This is a substrate that is very popular among wine manufacturers. This material is a rough textured paper, and has a very distinguished look on every product it is applied to.

**22. How should I store the label rolls?**

iSys Label recommends that all media rolls be kept in their plastic bag or box until the time of printing. If the packaging has been opened, ensure your media is not placed on a concrete floor. Prolonged exposure to air or moisture will cause the media to curl, warp or swell, thus resulting in less than optimal results when printing.



## **APEX2Print Software**

### **1. What is the APEX2Print software?**

APEX2Print 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 APEX2Print 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 APEX2Print 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 software use?**

The APEX2Print 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 APEX2Print software have the ability to reproduce Pantones®?**

Testing done on the APEX 1290 has indicated that approximately 82% of Pantones can be reproduced in respect to the applicable color gamut for the substrate.

### **6. Can the APEX2Print 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 APEX2Print 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 APEX2Print software is only compatible with Windows 7 Professional or Ultimate 64-bit.