

DIGITAL PRINTER INFORMATION

KBW utilizes a Mimaki JV3-160sp, digital imaging printer. This solvent printer is capable of printing media up to 5 feet wide, with resolutions of up to 1440 x 1440 dpi.

TECHNICAL SPECIFICATIONS

Ink Type: Solvent Ink

Print Mode: 8 color (2xCMYK)

Resolution: 360x360 - 1440x1440 (720x720 is our standard)

Printing Width: Anywhere from 9" to 60"

Printing Length: Dependant upon material

Printing Speed: Speeds up to 200 sq ft/hr, dependant upon quality of requested print.

Durability/Longevity

The Mimaki JV3-160sp uses solvent inks. These inks are more aggressive than aqueous or eco-solvent inks, allowing better adhesion to a wider variety of materials. Because of this, solvent prints are rated up to three years outdoors, resisting water and UV damage. Indoor banners should have a much longer life.

While solvent inks allow better adhesion to the material (resulting in a more durable product), it is worth mentioning that misuse can and will mar the prints, so a certain amount of care should still be taken in handling these materials.

PRINTING BASICS

KBW prints on a variety of media, utilizing a variety of resolutions for optimal results for the intended purpose of the banner. While a streetpole banner would not necessarily benefit from a 720x720 dpi, 8 pass unidirectional print, a tradeshow banner that is in front of people most definitely would.

Below, we will outline what basic factors influence the banner printing, and what they mean.

Resolution

The Mimaki can print in resolutions from 360x360 all the way up to 1440x1440. The lower setting is more ideal for applications such as billboards and banners that will be viewed from a distance. The higher resolution will yield a much sharper, crisper picture that is ideal for tradeshow banners and displays, where the public will be viewing it up close.

This resolution, however, is considered printer resolution; the resolution at which the Mimaki prints images. This is quite different from the resolution of a printed image. Therefore it is worth mentioning that an image with a poor resolution will not benefit from the printer's resolution. On the contrary, the resolution of the printer will make the poor quality of the file look even worse.

Number of Passes

Another factor in print quality is the number of passes the machine makes. The print head, as it moves over the material, drops ink in a way that it overlaps. How many times the print head drops ink over a linear inch of fabric determines the number of passes. For example, a 4-pass print will have the print head going over the same inch of material four times, whereas an 8-pass print will have twice the amount. The number of passes that a print has will result in a smoother, higher quality print. However, the more passes a print has will also increase the print time significantly.

Direction

The print head has two directions; away from the docking station, and towards the docking station. It has the ability to print either unidirectional or bidirectional. What unidirectional means is that the Mimaki will only print in one direction only. Conversely, bidirectional means that the print head will print in both directions. The difference is that a unidirectional print will be ultra-sharp, with crisp images. However, printing a unidirectional print doubles the printing time of the machine, due to the nature of the print.

PRINTER SPEED

As previously mentioned, all of the factors of how the machine lays down the ink greatly affect how fast the printer is able to print. With the applied printing specs that were outlined, the Mimaki can print around 70 sq ft/hr, or roughly 1.5 double-sided 30" x 94" banners. The other main factor is curing time.

The Mimaki JV3-160sp uses solvent inks. These are very aggressive inks that attach and bond with the media, by use of heat. As the printed material cools to room temperature, it cures into the media, making a print that is resistant to water and scratching without lamination. While able to be handled within a matter of minutes after it has been printed, the recommended curing time for any print is 24 hours.

While it may seem logical to assume that with higher heat will come faster curing times, that is incorrect. If the heat on the Mimaki is too high, the print can dry faster but will not cure as completely as possible, becoming brittle and fragile. Also, the layers of ink will dry inconsistently, resulting in heavy banding throughout the entire print.

LEAD TIME

With all of the above-mentioned factors, the lead time for digital printing has been set at 7-10 days. Below are some factors that may affect the overall lead time for banner orders.

- All lead times are based upon current work load and season.
- Bigger banner orders may require more than the normal amount of lead time.
- Printing a double-sided banner means that we have to allot time to print 2 copies of the banner. So, if we are printing 24 double-sided banners, we have to allot time to print 48.

If you have any questions or concerns, please contact your Consort Representative. We will do everything we possibly can to ensure that your order gets to you in a timely manner.

FINISHING

Unlike most of the banner manufacturers, Consort not only keeps the finishing in-house, but also has more experience at it, resulting in a much more durable hem and pole pocket. Below are the three standard methods of finishing banners.

Interior

For our interior banners, we use the Herculite Bantex 13oz. Non-Curl Blockout banner material. We single-roll the pole pockets and sew the hems. For double-sided applications, the Bantex material allows us to print front and back on the same material, so no side hemming is necessary. We then single-roll the pole pockets and sew the hems.

Exterior

For our exterior banners, we use the Herculite Bantex 18oz Blackout banner material. We double-roll the pole pockets, sew the hem and apply grommets (when necessary). As with our interior material, the Bantex material is able to be printed front and back on the same material, so no side hemming is necessary. We then double-roll the pole pockets and sew the hems.

Horizontal Banners

For banners that have a horizontal presentation requiring no pole pockets, it is very simple. We sew a 1" hem on the top and bottom, and add grommets. The industry standard states that you have a grommet every two feet for ease of hanging. However, we will put grommets wherever the customer requests them.

