HP PAGEWIDE PRINTERS AND WIDE FORMAT DEVICES. WHAT ARE THEY AND WHY DO I NEED THEM? By Dave Reis

The HP line of PageWide printers and plotters are built around HP's revolutionary printing system called PageWide. PageWide technology was developed as the next generation of ink jet technology. The goal was to design a newer, faster, more economical ink jet printing technology.

The PageWide technology was first introduced in 2009 in HP's high end, high speed ink jet web printing devices. In 2013 PageWide technology was introduced in office copiers and printers. In 2016 HP introduced new HD printheads to their high-speed web printing devices, and finally in 2018 HP introduced their PageWide XL wide format devices using the PageWide technology.

For this discussion we will focus on PageWide copiers/printer and PageWide XL wide format devices.

What is PageWide technology?

When HP set out to develop a new ink jet technology their goals were many. They wanted to control costs by allowing different levels of ink to be dispersed onto the paper. They wanted to minimize service requirements by minimizing the number of moving parts within the system. They wanted longer life printheads that were less prone to clogging. They wanted to increase printing speed, and also help the environment by reducing waste and carbon footprint. Thus, PageWide was born.

Their main competitor was the conventional color laser printer. The laser printer has been around for many years and has many benefits compared to the older ink jet technology. They were much faster, higher quality, didn't need special paper, lower operating cost, and no clogging of printheads. They also had some negatives such as higher initial investment, heat fusing technology limited the use of some media, and with many moving parts something could go wrong very easily.

The PageWide technology attempted to address all these concerns. When they created the actual inks they focused on two things. One was that the inks were to be as cost effective as possible and the other was that the ink could be utilized on standard paper.

They next addressed the servicing issues by eliminating as many moving parts as possible. Where a laser printer not only has the paper moving through the printer, it also has 4 drums moving as well as 4 lasers, and a fusing unit whereas the main moving part in a PageWide unit is the paper since the printhead is stationary.

Where laser printers require more power, heat, and also emit ozone when printing documents PageWide technology uses up to 84% less energy, and produces no heat nor ozone. As far as environmental concerns go the PageWide technology generates up to 95% less supplies and waste than the conventional laser printer.

With less moving parts HP has been able to increase printing speeds by 20ppm over traditional ink jet devices.

Probably the biggest advancement was the ability to control how much ink is placed on the paper. This allows the end user to print different levels of ink depending upon their requirements and these different levels of ink provide different levels of cost. The industry average cost of a color print is approximately 5 times more expensive than a black white print. Now imagine having the ability to print a full color document at the cost of a black white print. PageWide provides this ability.

How does PageWide do it?

In the office copier/printer category there are 3 different printing levels available to the end user.

1. General Office: This mode produces a lighter, more washed out color document at the same price as a black white one. Primarily designed for in house color documents where color is required, but the traditional bright colors are not. Allows the use of color at the same cost as black white thus lowering costs.
2. Professional: Your typical vivid, high quality color documents. Designed for impact.
3. Accent Color: An automatic feature where you have a document with a low percentage of color (<.5%) that automatically tracks the print at the same price as a black white print. The benefit here is that the color is not washed out. An example would be a company logo on an invoice.

Now that we have a better understanding of what PageWide technology is, let's look at their product lines. We will again focus on their office copier/printer line up and their wide format line up.

The PageWide office copier line up is broken into two categories: PageWide Pro and PageWide Enterprise.

PageWide Pro devices are designed for customers wanting to produce general office documents and are very price conscious. They are also designed for areas where space constraints are a factor. Traditionally lower procurement costs but slightly higher operating costs. Low to mid volume customers.

PageWide Enterprise devices are designed for professional SMB and enterprise customers. These customers want faster, more feature rich devices along with advance management tools and advanced solutions. Traditionally higher procurement costs but lower operating costs. Mid to high volume customers.

The PageWide wide format devices are called the XL models. Wide format is defined as printing on to a roll of paper 18" to 40" wide. Traditionally found in the engineering and architectural marketplace. The PageWide devices were designed to compete against traditional LED or laser wide format devices.

HP's goals were similar in that they wanted to produce high speed, high quality color prints at a more effective cost point than LED laser. Through the years HP has been known for their ink jet wide format models designated Designjet. These models are industry leaders for low to mid-level printing where color is required. Their inks are of the more traditional design where paper will greatly affect the quality. The Designjets are also traditionally slower in printing.

HP's goal with the PageWide XL's was to compliment the Designjets by positioning them as the next level above them. Designed for high speed, lower operating cost and more flexible media, the PageWide XL's were HP's answer to the traditional LED Laser wide format competitors.

The new PageWide XL devices can deliver color at twice the speed of LED Laser with lower operating costs. With a new generation of pigment based inks the PageWide XL devices can produce darker blacks and vivid colors on uncoated bond paper and can produce unbelievable colors on specialty papers making the PageWide XL products very versatile. The inks are also very durable, resistant to water, highlighters and smudging.

The PageWide XL's have 8 printheads using CMYK colors. They have 1,200 nozzles per inch and 202,752 nozzles per XL printer. They can drop 3.65 million drops of ink per second.

The PageWide XL devices are also designed with serviceability in mind. HP has created Preventative Maintenance Kits (PMK) that are designed to replace specific usage parts before they fail. These units have 12 different PMK's available making downtime minimal.

Another important design was similar to the copier/printer devices where the PageWide XL products can control or track the amount of ink dispersed. This allows the end user the ability to pay less per sq ft depending on the amount of color dispersed which helps reduce operating costs.

There are currently 4 different models in the XL line up.

- XL 8000 – handles up to 6 rolls of media, dual ink (8 inks) supplies for long uninterrupted runs, optional stackers and folder units, and a large 8" touchscreen.
- XL 5000 – handles up to 4 rolls of media, dual ink (8 inks) supplies for long uninterrupted runs, top stacker, and a large 8" touchscreen.
- XL 4500 & 4000 – handles up to 4 rolls of media, single ink (4 inks) supplies, top stacker, and a large 8" touchscreen.
- Standalone scanners are also available for customers who do not have the need to print.

Hopefully you now have a better understanding of the HP PageWide technology and its benefits. The HP PageWide product line up has many different models especially in the copier/printer line up that can be very confusing to end users. Please reach out to us for more information and we will have one of our HP authorized consultants contact you.