# Лекция № 6

## p. 38, WHICH TYPE OF PRINTER SHOULD I BUY?

Printing is the final stage in creating a document. *Since* the results you can obtain with different types of printer will vary substantially, here is a guide to help you decide which one is most suitable for your *needs.*

*To begin with,* you should take into account that printers vary in cost, speed, print quality, and other factors *such as* noise or printing method. Technology is evolving so quickly that there is always a printer for every application or need.

**Dot–matrix** printers use pins to print the dots required to shape a character. They can print text and graphics; however, they produce relatively low resolution output — 72 to 180 dots per inch (dpi). They are used to print multi-part forms, self-copying paper and continuous–form labels. They are slower than laser printers (see below) but much cheaper.

**Inkjet** printers operate by projecting small ink droplets onto paper to form the required image. Colour and hues are created by the precise mixing of cyan, magenta, yellow and black inks. Inkjets are fairly fast, quiet, and not as expensive as laser printers. Nevertheless, you can still expect high quality results *because* there are some inkjet printers on the market with a resolution of 2,400 dpi.

**Laser** printers produce output at great speed and with a very high resolution of 1,200–2,400 dpi. They scan the image with a laser beam and transfer it to paper with a special ink powder called toner. They are constantly being improved. In terms of speed and image quality, laser printers are preferred by experts for various reasons; *for instance,* they have a wider range of scalable fonts than inkjets, can emulate different language systems, and can produce high-quality graphics; however, they are still expensive for home users.

**Thermal transfer** printers are used to produce colour images by transferring a wax-based ink onto the paper. They are popular for printing bar codes, labels and medium-resolution graphics.

**Imagesetters** produce very high-resolution output (up to 3,540 dpi) on paper or on the actual film for making the printing plates. In addition, they are extremely fast. Imagesetters are most often used in desktop publishing (DTP). Although they produce the highest quality output, they have one important disadvantage: they are too expensive for homes or small offices.

In modern lithographic printing, images are created on a DTP computer and *then* output directly to the printing plates, without requiring film as an intermediate step. This technology is called **computer to plate,** or **CTP,** and the machine used is called a **platesetter.**

*Finally,* we have **plotters.** Plotters use ink and fine pens held in a carriage to draw very detailed designs on paper. They are used for construction plans, engineering drawings and other technical illustrations. Nowadays, traditional plotters are being replaced with wide-format inkjets.

### Glossary

|  |  |
| --- | --- |
| Obtain | Получать |
| Vary | Различаться |
| Substantially | В значительной степени |
| Suitable | Подходящий |
| Take into account | Принять к сведению |
| Evolve | Развиваться |
| Dot-matrix printer | Матричный принтер |
| Pin | Штифт, иголка |
| Shape | Формировать |
| Relatively | Относительно |
| Inkjet printer | Струйный принтер |
| Ink | Чернила |
| Droplet | Капелька |
| Hue | Оттенок |
| Precise | Точный |
| Magenta | Пурпурно-красный |
| Dpi | Точек на дюйм |
| Beam | Луч |
| Powder | Порошок |
| In terms | С точки зрения |
| Range | Диапазон |
| Scalable | Масштабируемый |
| Thermal transfer printer | Термотрансферный принтер |
| Wax | Воск |
| Bar code | Штрих-код |
| Imagesetter | Фотонаборный автомат |
| Desktop publishing (DTP) | Настольная издательская система (НИС) |
| Computer to plate (CTP), platesetter | Компьютер — печатная форма |
| Plotter | Графопостроитель, плоттер |
| Fine pen | Перо |
| Held | Удерживать |
| Carriage | Каретка |

### Annotation in Russian

Поскольку результаты, которые вы можете получить на разных типах принтеров, будут существенно различаться, вот руководство, которое поможет вам выбрать, какой из них наиболее подходит для ваших нужд. Матричные принтеры имеют низкое разрешение печати (72–180 dpi) и медленно печатают, но зато они дешёвые. Струйные принтеры довольно быстрые, тихие, имеют высокое качество печати (до 2400 dpi) и не такие дорогие, как лазерные принтеры. Лазерные принтеры быстро печатают и имеют высокое разрешение (1200–2400 dpi), но довольно дороги для домашнего пользователя, хотя их предпочитают эксперты из–за преимущества в некоторых характеристиках относительно струйных принтеров. Термотрансферные принтеры используются для печати штрих–кодов, этикеток и графики среднего разрешения. Фотонаборные автоматы быстро печатают и обеспечивают очень высокое разрешение печати (до 3540 dpi), но при этом они очень дороги для домашних пользователей и малого бизнеса (зато они используются в НИС). В современной литографической печати используется «компьютер — печатная форма» (Computer to plate (CTP), platesetter). Графопостроитель или плоттер используется для печати планов строительства, технических чертежей и других технических иллюстраций. В настоящее время традиционные плоттеры заменяются широкоформатными струйными принтерами.

## p. 38, ex. C

1. designs and images used in magazines, books, etc. (lines 10–15): **graphics**
2. output quality, measured in dots per inch (lines 10–15): **dpi**
3. a particular colour within the colour spectrum (lines 15–20): **hue**
4. an ink powder used in laser printers and copiers (lines 25–30): **toner**
5. set of characters that can be resized (enlarged or reduced) without introducing distortion (lines 30–35): **scalable font**
6. a rectangular pattern of black lines of magnetic ink printed on an object so that its details can be read by a computer system (lines 35–40): **bar-code**
7. surface that carries a reproduction of the image, from which the pages are printed (lines 45–50): **printing plate**
8. in–between; middle (lines 50–55): **intermediate**

## p. 39, ex. 2A

|  |  |  |
| --- | --- | --- |
| Giving examples | Listing/Sequencing | Giving reason/cause |
| Such as (7 str) | To begin with (5 str) | Since (2 str) |
| For instance (31 str) | Then (49 str) | Because (23 str) |
|  | Finally (54 str) |  |

«Needs» (4 строка) вообще никуда не подходит, скорее всего его случайно выделили курсивом.

## p. 39, ex. 2B

|  |  |  |
| --- | --- | --- |
| Giving examples | Listing/Sequencing | Giving reason/cause |
| For example — например | Above all things — прежде всего | As — так как |
| let us say — например | After — затем | In that — так как |
|  | Further — далее | Being that — так как |
|  | In the end — в конце |  |

## p. 40, ex. 5

1. A laser printer is generally (quiet) **quieter** than a low-cost inkjet printer.
2. Multi-function printers are now only slightly (expensive) **more expensive** than conventional printers, and offer much (great) **greater** versatility.
3. The print quality of this network printer is noticeably (good) **better** than any inkjet, and as (good) **good** as similar laser printers.
4. The Agfa platesetter is (reliable) **more reliable** and (easy) **easier** to use than most printers of its type.
5. Your printer is only as (good) **good** as the paper you use.
6. The final result is always (accurate) **not as accurate as** than the original image.
7. An imagesetter is (heavy) **heavier** than a laser printer.