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Guide to sourcing Photocopiers



**How to find the right
photocopier for your business**

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INTRODUCTION

The range of options is vast when it comes to choosing a photocopier for your office. For starters, there is an extremely large number of actual photocopiers on the market to choose from, all of which have different speeds, functions and prices. Then there is the manner in which you purchase it; either buying it outright, leasing or renting. And finally, you will need to consider the maintenance and service arrangements to deal with the inevitable hiccups that will occur during its operational life.

This guide aims to discuss some of these options and help you make the right decision when choosing your photocopier.

Your photocopying requirements

Assessing your needs is the key to choosing the right photocopier, as the volume and type of copies you need to make will ultimately determine the machine best suited to your office. Thinking about the following points should help start that process:

- How many copies will you need to make on a monthly basis?
- Will you need both colour and black & white copies?
- What size copies will you need to make and on what sort of paper would you like them?
- Will you need additional functions such as image editing or double sided printing?
- Will you expect your photocopier to also act as a scanner or fax machine?

Having answered the questions above, you should be better equipped to determine which photocopier is most suited to you. One of the main distinguishing features of photocopiers is size; initially then, this gives us three distinct categories of copier to consider.

TYPES OF PHOTOCOPIER

Portable photocopiers

Small, portable, desktop photocopiers are now available at very affordable prices. Unfortunately however, due to their slow speeds, limited tray capacity and lower print quality, they are more suited to home rather than office environments. If your needs are anything beyond 500-1000 copies per month, or if you require high-resolution printing, this option is unlikely to work for you. If, however, your needs are more limited then this type of photocopier is certainly the most economical.

Desktop photocopiers

This term can be misleading, as although desktop photocopiers are smaller than their floor standing counterparts, they will normally take up the best part of an average desk. For small to medium sized businesses with a limited number of users, these can be a very reasonable option. Although their tray capacity, print speed and sorting options are often more limited than that of floor-standing photocopiers, at the top end of the market desktop photocopiers offer just as many image editing features as their larger counterparts.

Floor-standing photocopiers

Most medium to large offices or those with a high demand for print services will find that a floor-standing photocopier is best suited to their needs. As the name suggests, these are larger, stand-alone machines which, due to their size, generally have much larger tray capacities and can print on larger paper formats.

Floor-standing copiers typically have printing speeds of 35-60CPM and a maximum print volume of 100,000-200,000 copies per month. At the very highest end of the market are giant printing hubs capable of 100CPM+, but generally these are used by professional printing

companies rather than in offices where printing and copying is not the first and foremost task of the day. Most copiers also feature an ADF (Automatic Document Feeder). This means that the machine can make multiple copies of multiple different originals, so there is no need to actually stand next to the copier and replace the document being scanned.

Floor-standing copiers are also often known as MFDs or multi-function devices. This is because they also incorporate a scanner, a fax machine or a printer (or all of the above). Often these features are accompanied by OCR (optical character recognition) software, which can recognise text and convert paper documents into an electronic format for editing. Obviously the more features you want in your machine, the more you will have to pay (see **Pricing**). They can also offer a number of print sorting options which are unavailable with smaller models, including hole punching, stapling, booklet making, laminating and comb binding.

TOP BRANDS

Canon

The Canon iR series offers a range of photocopiers from desktop to high-end printing hub. Perhaps the most comprehensive range of solutions, with the best maintenance support.

Hewlett Packard

Generally caters for the lower end of the market (mostly desktop machines). At the higher end of their range they offer office multi-function machines (30CPM copy speed), priced at around £3,000.

Konica Minolta

The Konica Minolta “BizHub” is one of the most popular and respected models of photocopier on the market. They produce a whole range of office machines, but specialise in high-end copiers for the professional print room.

Kyocera

Kyocera copiers generally fall in the middle market. They produce office copiers and multifunction machines that range between 15 and 60CPM that are more compact than most major brands. They are also one of the more openly environmentally friendly brands.

Panasonic

Panasonic deal mostly in home office and small office machines – the largest machine in their range is capable of 60CPM. They also have one of the most reliable service and maintenance track records.

Ricoh

The Ricoh “Aficio” range offers photocopiers and multi-function machines for every occasion, including professional printing at the very highest level.

Samsung

Samsung produce multi-function devices for the lower end of the market, mostly desktop machines priced under £2,000.

Toshiba

Another mid-market brand, offering medium sized office multi-function devices, generally under the £10,000 mark with their eSTUDIO range.

PHOTOCOPIER MAINTENANCE

In most offices a malfunctioning photocopier will cause serious logistical issues and a great deal of frustration. Furthermore, due to the complexity of most modern machines they can be very costly to repair. Because of both these points, it is common practice to have in place a service or maintenance contract; so that for a pre-arranged monthly fee, a third party will take on the responsibility of ensuring the copier is kept in good service.

The arrangements for maintenance contracts vary but if you lease or rent your photocopier, it is likely that you will also be bound to an ongoing service arrangement; so be sure that you have read all the small print. Regardless of this, however, the following should give you a better idea of the sorts of conditions and level of service to expect. Consider these points when assessing contracts:

- Will you have to pay a fixed monthly fee, a fee based on the volume of usage or both?
- How long will it take to send out a technician if the photocopier breaks down?
- Will the contract cover the cost of parts and labour if the photocopier needs to be repaired?
- At what cost will the photocopier consumables (toner, ink, etc) be supplied?

Typical photocopier contract terms

A typical photocopier contract will usually charge you a fixed monthly fee plus an additional fee for every page printed over an agreed limit. This is because a heavily used machine will obviously require more in the way of consumables and maintenance than one that is

used very rarely. In a similar vein to mobile phone contracts, there are usually lots of different price plans to choose from and these should range from those with very low monthly fees, lower copy limits and higher costs per excess page; to comparably very high monthly fees including unlimited copier use.

As pointed out above, in any office a broken photocopier will cause problems, especially as it's fairly standard to have a combined photocopier and printer. In order to minimise the disruption this causes, any good maintenance contract will have a predetermined response time, within which the supplier is obliged to send out a technician. It is not uncommon for this to be the same day or even just a matter of hours, provided that the supplier is called within certain times. It should also make absolutely clear who will pay for parts and labour and under which circumstances. However, this will vary drastically depending on who owns the photocopier, and therefore should be thought about well in advance of purchasing a copier outright.

Alternatives to service contracts

It is rare but in some cases it's possible to have an extended warranty for your photocopier. This will usually only apply to cheaper machines, where it is not economically prudent to take on a service contract. Extended warranties will usually cover much less than a typical service contract and it is highly unlikely that a technician would be sent to your office. As such, relying solely on a warranty will usually mean long delays while your copier is sent away for repair.

In other cases it is possible to arrange a pay as you go contract, wherein costs are only incurred if the photocopier needs attention. Again though, this type of arrangement makes more sense for cheaper machines or those which are only used at a fraction of their capacity as the callout and repair fees are generally higher and so you are bearing a greater financial risk. In most cases however, the service contract is as indispensable as your photocopier itself due to the convenience and safety-net it provides.

PAYMENT OPTIONS

An office photocopier is an expensive piece of kit, and companies looking to procure one may be reluctant to shell out thousands of pounds in one go. There are several different payment options with their positives, negatives and occasional pitfalls.

Leasing

Broadly speaking there are two main types of lease. But within these categories, every lease contract is different. When you're leasing a photocopier it's absolutely crucial that you check the terms and conditions of the contract, because while the right lease can be a useful option, leasing companies are notorious for stinging customers with conditions in the small print.

Lease rental

This involves paying for your photocopier over a period of time specified in the contract (usually a year or more). Almost all of these stipulate a minimum term for the lease, so if you want to back out early and get rid of the photocopier you will have to pay the remaining instalments up front.

The important thing about this type of payment is that the leasing company **retains ownership** of the photocopier even after the lease expires. Be aware of this when you're signing the contract – some people end up paying thousands of pounds over a period of years under the misapprehension that they will own the photocopier at the end. This is not always the case.

The positive aspects of this sort of agreement are you don't have to pay any large one-off payment, and that it usually entails a maintenance service and the option of upgrading to a newer model free of charge.

Lease purchase

A lease purchase agreement follows the same idea as lease rental – lower monthly or quarterly payments over a fixed period of time – but when the lease comes to an end **you are given ownership of the photocopier**. As with lease rental, you must pay a settlement figure up front if you wish to end the lease and get ownership before the minimum term is up.

With all leases you should thoroughly check the terms of the contract, including the interest rates on the total amount payable. Also be careful regarding what happens at the end of the agreement – sometimes your lease will run on beyond the minimum term unless you expressly say you wish the contract to end.

Maintenance agreements and consumables (paper and toner) are sometimes, but not always, included in the terms of the lease.

Rental

Renting an office photocopier is the best option for those who know that they only need the equipment temporarily. Obviously you will not get ownership of the machine, but unlike lease rental there are no minimum terms involved so there is much greater flexibility in length of use.

Purchase

Buying your photocopier outright requires you to pay a lump sum up front, which in turn may mean you have to take out a bank loan. This is why leasing is often a more preferable method for financing the deal, because the schedule of payments is more reliable and transparent than the repayments of a standard loan.

If you can muster the cash though, you won't be tied down to any contract and you can do whatever you please with your photocopier. The downside is you'll need to provide all the extra paraphernalia such as paper and toner, and you won't get free upgrades when your photocopier becomes out of date.

PRICING GUIDE

Purchasing

A very basic desktop photocopier can be bought for under £100, but don't expect a copy rate of much more than 20CPM (copies per minute), and copy resolution will be low.

An entry-level, stand-alone copier costs about £800-£1,000. This will meet the needs of a small office (about 10 people), with a copy speed of about 30-35CPM. These will usually be multifunction devices that can also print and scan (add another few hundred pounds for a built-in fax machine).

In general you should be looking to spend upwards of £2,000 for a stand-alone office copier with a high work rate. A popular multifunction copier such as the Konica Bizhub comes in three different models that range from £2,500 to £4,500, with a work rate that ranges from 36CPM to 50CPM and a maximum duty cycle of 150,000 copies per month.

In the £5,000 to £10,000 bracket are the high performance machines boasting 60CPM and additional features including binding and booklet making.

There are also super heavy-duty machines that offer up to 100CPM and a whole range of finishing accessories such as booklet making and page trimming. These are more comprehensive, professional printing hubs than photocopiers that can work round the clock without any down time. More so than other copiers, you will need to consider the amount of space that this sort of machine will take up – they can be 3 or 4 metres long and may require a separate room to be housed in due to the noise. These can be priced at anything from £20,000 to over £100,000.

Leasing

You can lease an office copier for as little as £20-£30 per month, but a good guideline for a high performance machine (multifunction, 35CPM+) is about £100-£120 (plus VAT). For very large machines (up to 100CPM) expect to pay around £250-£300.

Obviously there will be a minimum term for the lease – these prices are based on a 5 year lease, but may be higher if the contract is shorter.

Consumables

A standard toner cartridge costs about £60-£80.

GLOSSARY

Analogue and Digital Photocopiers

Although analogue technology is now all but obsolete, analogue refers to photocopiers that replicate an image using a process known as the 'light lens' method. This technology offers far less flexibility than modern digital machines, which scan a document (or a number of documents) and can then print an indeterminate number of copies with the saved data. Analogue machines can only cope with one image at a time and cannot be 'networked' in the modern office sense.

ARDF

This stands for Automatic Reverse Document Feeder; which is a document feeder capable of copying both sides of an original.

Automatic Document Feeder

This refers to a document feeder which automatically feeds a number of documents into the photocopier for copying. This is invaluable when copying large documents quickly is required.

Bridge Unit

This is an additional unit that some photocopiers require in order to use features like sorters or finishers.

Bypass Tray

A bypass tray allows the user to directly feed paper into the copier, without using one of the built-in trays. Bypass trays are usually only needed when using non-standard paper that is of a size or weight not suited to the copier.

Coated Paper	Often referred to as glossy, coated paper reacts slightly differently when ink is applied and thus gives a crisper, more professional result.
Consumables	This refers to the various types of printing 'ink' or chemical developer that photocopiers apply to the paper when printing.
Continuous Copy Speed	As suggested, this refers to the speed at which multiple copies can be made by simply pressing the start key a single time.
Copies Per-Minute	Related to the above and often simply referred to as the copier's CPM, this simply denotes the number of standard A4 pages the photocopier can produce in 60 seconds.
Copy Size	This refers to the size of print area the copier is capable of producing. All copiers will have a maximum and minimum copy size.
Contrast Control	Contrast control allows the user to adjust overly light or dark images, so as to print a more balanced image. Often modern photocopiers will make automatic adjustments.
DPI	Stands for dots per inch and reflects the photocopiers resolution; the higher the DPI the better the quality of the copy.
Drum	The drum is the part of the photocopier that actually forms the image on the paper.

Duplex Copying	This is the technical term for double sided printing.
Fax Board	A fax board allows digital photocopiers to also act as fax machines.
First Copy Speed	This denotes the speed at which a copier can scan and print the first page of a given document.
Finisher	A finisher is an output catch tray, often with an automatic stapler incorporated.
Image Editing	This term refers to any digital alteration to the original image prior to photocopying. It can include but is not limited to: zooming, cropping and colour or contrast alteration.
Landscape / Portrait	Describes the orientation of the image printed. When landscape the bottom of the image will be parallel to the longest side of the page. Conversely, when printed in portrait, the base of the image will be parallel to the shortest side of the page.
Maximum Copy / Original Size	This is refers to the largest size page a photocopier can accept, either as an original or copy.
Originals Per-Minute	Sometimes referred to as simply OPM; is the number of original documents a photocopier can scan in 60 seconds.

OCR

Stands for optical character recognition. This is piece of software installed in the machine that allows it to recognise characters on the documents it is scanning and convert them to electronic, editable documents.

Paper Size

As suggested this is the size paper that will be printed. The most common notation for paper size is the A – Series. All paper sizes starting A have an aspect ratio of $1 : \sqrt{2}$ and A0 is designed to have an area of 1m squared. Here are the most commonly used sizes in the A-Series and their dimensions:

- A0 – 841 x 1189mm
- A1 – 594 x 841mm
- A3 – 297 x 420mm
- A4 – 210 x 297mm
- A5 – 148 x 210mm
- A6 – 105 x 148mm

Platen Glass

The platen glass is the glass area upon which the original document is placed for copying.

Simplex

As opposed to duplex, means single sided printing.

Sorter

When photocopying large documents, a sorter can automatically collate the different pages in the right order. Some sorters can also staple or magazine-fold documents.

Subtractive Primary Colours

These are the three primary colours that all modern printers mix in different quantities to create their infinite range of colour tones. Sometimes referred to with the abbreviation CMY, they are: cyan, magenta and yellow. The abbreviation CMYK refers to the three primary colours and black.

Tray Capacity

The tray or bin capacity of any given photocopier refers to how many sheets of blank paper it can store ready for printing.

Weight

When referring to paper, weight refers to its thickness; which is usually given in gsm (grams per square meter).