

**A****ADF (Automatic Document Feeder)**

ADF refers to the most simple type of feeder that is able to process only single-sided originals (in contrast to RADFs which can also handle double-sided ones). ADFs on analogue copiers require sorter bins in order to produce multiple sets of multi-page documents - the machine makes all the copies of each page in a batch, depositing one copy in each sorter bin. ADFs on digital copiers do not require sorter bins if the machine operates with scan-once/print-many technology - the originals are instead scanned to memory, and complete sets are output sequentially on top of one another in a catch tray. The capacity of the ADF is typically 30 – 50 sheets.

**Analogue**

Traditional copier technology, employing the "light lens" method to reproduce originals, scanning the original every time for each copy required. This is as opposed to scanning the originals electronically as on digital copiers.

**B****Bypass (Tray)**

Allows you to feed non-standard paper without having to put it in one of the main paper trays. Useful if you want to feed paper that's especially difficult to copy onto - for example, very light or heavy paper (as the paper path is straighter and the chances of jamming are reduced.) Most copiers have a bypass of some sort. With some you can feed only one sheet at a time, while others allow you to stack up to 50 or 100 sheets.

**C****Catch Tray**

Simple output tray that receives copied pages. Analogue machines with RADFs require sorter bins in place of catch trays to produce collated output. Digital machines with scan once/print many technology are able to deliver collated sets to catch trays without the need for sorter bins.

**Click Charge**

A cost per copy charge that is levied to cover both the capital component and the operating cost of a photocopier. The click charge generally relies on meeting a minimum monthly copy volume and is calculated by the supplier by adding the standard copy charge to the monthly rental component. To work out the net cost per copy (click charge) you have to work to an agreed copy volume. Click charges form the basis of most Copy Plan agreements.

**Controller**

In a copier context, this refers to a device that upgrades a digital copier into a multifunctional device with a printer function. Can be either an internal device built into the copier or an external one (sometimes based on PC hardware) that sits next to it. Sometimes referred to as "RIP" (raster image processor).

**Copy Auditing**

Feature that restricts access to authorised persons and/or records details of usage. Can be useful when copies have to be expensed to departments or billed to clients. Typically operates by users entering PIN codes on a copiers control panel. The number of accounts the feature can handle will vary - typically anything from fewer than 50 to several thousand. The number of digits in the account codes will also vary - most commonly 4 digits.

**Copy Plan**

A form of financing the acquisition of a photocopier that includes the machine rental plus the copy charge to arrive at a net cost per copy (click charge). A copy plan agreement requires commitment by the buyer to a fixed term plus an agreed copy volume. Some plans allow credits for extra copies run each month so that the machine is effectively paid off sooner. Some companies may penalise for not meeting agreed monthly targets.

**CPM (Copies per Minute)**

Measure of a machine's engine speed when making A4-size copies (the same as PPM - pages per minute).

**Copy Charge**

Usually refers to a fixed rate (per copy) used to cover the maintenance of a copier as distinct from the capital component of the machine (ie. purchase, rental or lease cost). The copy charge generally covers the operating cost of a machine providing all preventative maintenance costs, toner, drum replacement in addition to the replacement of most items subject to wear and tear. In some instances the copy charge can cover the capital component by adding this to the operating charge - this is often called a "click charge".

**Custom Message Annotation**

Feature found on certain digital copiers that enables you to have a message stamped on copies and that allows you to vary what the message is (in contrast to a more limited feature that restricts you to a few factory-preset messages such as "Urgent", "Confidential", "Draft" etc).

**D****Date/Time Stamping**

Feature found on some digital copiers allowing you to have the date and time stamped on copies as they are made.

**Digital**

State-of-the-art copier technology. Digital copiers scan and digitise originals before reproducing them (as opposed to using the analogue "light lens" method) essentially, they are converting images to computerized data. All multifunctional copiers are digital, though not all digital copiers are multifunctional.

**Duplex**

Double-sided copying. Double-sided copying results in slower operation. Most machines use the internal tray method of duplexing, where sheets are stacked after the first side has been copied prior to being copied on the other side. Note that the number of double-sided copies that can be made in a single run is limited by the capacity of the duplex tray - typically 50 sheets, but sometimes less. Some machines (especially digital machines) instead use a stackless method of duplexing - this frees you from the run-length constraint of the tray method.

**E****F****Finisher**

Output device, usually with an automatic-stapling device. The word "finisher" is often used to describe the entire output catch tray/stapling device, not just the stapling part

- i.e., offset stacking is implied. Finishing on OCT (offset catch tray) equipped machines often takes place without any material effect on job time, in contrast with stapling on stapler-sorters, which invariable adds to job time. A booklet or saddle stitch finisher allows you to produce documents that are staple along the crease or fold of the pages.

**G****H****I****Image Rotation**

Feature on some digital copiers that automatically aligns the image with the paper when the correct orientation isn't present to begin with. Can also be used to deliver alternate sets rotated at a 90 degree angle for separation purposes when producing multiple copies of multi-page documents (this works with paper fed long and short edge from two different trays). However, this has a negative impact on job times and is only appropriate on entry-level digital configurations where there is not catch tray with mechanical offsetting.

**Image Shift**

Common feature allowing you to shift the image of your original a little way across the page to leave a margin for binding. With duplex copiers, the margin position can be altered automatically from left to right side of a bound document. Also known as "margin shift".

**Insert Mode**

Feature allowing you to program a job so that selected pages - the start of new sections within a document, for example - can be copied onto different paper drawn from one of the other paper trays. You can generally copy onto the insert sheets, as opposed to just having the machine insert blank ones. Also known as "sheet insertion". Some machines have a "post engine cover insertion" mode whereby covers can be added at the output stage (finisher) without having the problem of feeding thicker card stock through the fusing rollers. This can be an advantage if you need to put thicker covers around booklets.

**J****Job Memory**

Feature allowing you to program a sequence of instructions needed to execute a complicated copying job, so that you can set it all in motion at the press of just one or two buttons. Not to be confused with the image memory that holds scanned copies on a digital machine.

**K****L****LCT / LCB**

Large capacity tray/bin. Generally refers to a paper tray holding 1,000 sheets or more.

**Lease**

A form of financing the capital component of a copier that relies on spreading the cost across a number of payments over a fixed lease term. Similar but different to

rental schemes. A finance lease is what is normally offered by suppliers and relies on a set "residual" to determine the rates (i.e. monthly lease charge). At the end of term, payment of the residual amount (usually expressed as a percentage of the purchase price) will transfer ownership of the machine from the finance company to you.

An operating lease is different to a finance lease in that there is no obligation for you to pay out the residual and assume ownership of the goods at the end of lease term. You may, however, be able to purchase the goods at fair market value or extend the lease at reduced rates. In simple terms, an operating lease is like a rental scheme but with more flexible end-of-lease options.

## **M**

### **Multi-functional**

Describes digital copiers that can also serve as computer printers and, in some cases, fax machines and scanners. Multifunctional upgrades are available on most, though not all, digital copiers.

## **N**

### **Network Interface Card (NIC)**

Required for networking a multifunctional copier-printer. The most common standard is Ethernet, which comes in two main options: 10BaseT and the newer and faster 100BaseT. The NIC is often part of the controller and not priced separately. In some cases, however, it is presented as a separate item.

## **O**

### **OCT (Offset Catch Tray)**

A device that receives copied pages, mechanically offsetting each.

## **P**

### **Paper drawers/trays**

"Drawer" and "tray" are used interchangeably when talking about paper supplies. The standard paper supplies are almost always front-loading, as are some options, but large-capacity trays holding 1,000 sheets or more may be attached to the side of the copier. The number of paper trays and their capacities will vary from one machine to another.

### **Platen**

The glass surface on which originals are placed for copying. With a document feeder, your originals are transported to and from the platen automatically; the only occasions you manually copy from the platen tend to be with originals that are awkward or impossible to feed. Platen sizes vary and can be typically A3 or A2 sized. In most digital machines, the original is passed across a scanning window rather than being deposited on the platen for copying as they are in analogue copiers. In digital machines, therefore, the platen is used solely for the manual feeding of originals.

### **PPM (Pages Per Minute)**

Measure of a machine's engine speed when making A4-size copies. Many people use "copies per minute" (cpm) instead, though ppm is also appropriate for multi-functional machines with both copy and print functions - either way, the ppm and cpm figures are the same. The ppm/cpm speed is best viewed as that which the copier is

guaranteed not to exceed, not that which it will generally maintain in real-life jobs. In practice, the selection of features such as double-sided copying, stapling and sorting can all impact real-life speeds, and short run work will generally result in fewer copies per minute being made than on longer run work.

**Pre-selection**

This refers to the number of copies you can tell your copier to make in one run. mid-volume machines usually go up to either 99 or 999. However, if you rely on sorter bins for collation, the maximum unattended run length is generally limited by the number of bins. Likewise, double-sided copying may be limited by the capacity of the duplex tray.

**Productivity**

In a copier context, this refers to the actual number of copies made per minute on a given job as a proportion of the quoted engine speed.

**Q****R****RADF (Reversing Automatic Document Feeder)**

A type of document feeder that can handle double as well as single sided originals in contrast to an ADF that work only with single-sided originals. RADFs on analogue copiers require sorter bins in order to produce multiple sets of multi-page documents - the machine makes all the copies of each page in a batch, depositing one copy in each sorter bin. RADFs on digital copiers do not require sorter bins, providing the machine is operating with scan-once/print many technology. The originals are instead scanned to memory and complete sets are output sequentially on top of one another in a catch tray. The capacity of the ADF is typically 30 – 50 sheets.

**RDF (Re-circulating Document Feeder)**

A term used to describe a hybrid document feeder with elements of RADF and RDH technology. An RDF can work with either sorter bins or an OCT (offset catch tray). When used with certain sorters, it can automatically resume copying when the bins are emptied if you need more than 20 sets - this is because the originals are returned to the "ready" position, as opposed to being ejected as with an RADF.

**RDH (Re-circulating Document Handler)**

A type of document feeder found on some analogue copiers that enables you to produce multiple collated copies of multi-page documents without the need for sorter bins. Found mostly in the high-volume range. An RDH copies one complete set after another by constantly re-circulating the originals (as opposed to making all the copies of each page in a batch). Works with an OCT (offset catch tray) or finisher that receives and - with finishers - staples the sets as they are output, offsetting each one slightly for separation purposes. The main benefit is that it removes the quantity restraint on multi-page collated copying imposed by the number of sorter bins. (The only limit is the capacity of the OCT itself which varies from 500 - 2000 sheets). Another benefit is that the auto stapling process at the output end can have no noticeable effect on job time (in contrast to auto-stapling on sorters, which adds to job time). The main drawback is that the constant re-circulating of originals raises the risk of misfeeds and damage/markings to originals.

Digital machines with scan once / print many technology use conventional document feeders to provide the same function as an RDH.

**Reduction/Enlargement**

Allows users to reduce or enlarge an image when producing copies. Most modern copiers come standard with this capability. See also zoom.

**Rental**

A form of financing the acquisition of a photocopier that relies on spreading the cost across a number of payments over a fixed rental term. Similar, but slightly different to a lease plan. Rental differs from a lease plan in that there is no residual amount that can be paid at the end of term and assume ownership of the machine. Usually, the machine is returned to the vendor.

**Residual**

An amount, usually expressed as a percentage of the purchase price (but can be a fixed amount), that is used in a lease plan. The residual, along with the lease term can determine the repayment rates. Payment of the residual amount at the end of lease transfers ownership from the finance company to you.

**Resolution**

A quantitative measure of how a digital copier scans and prints copies. Generally 400 dpi or 600 dpi, the higher number being better (600 dpi means that the scanned image consists of 600 x 600 or 360,000 dots to the square inch). It is possible for the scan resolution to be higher than the resolution at which the copies are actually output - typically, however it is the same.

**S****Scan Once - Print Many**

Used to describe the reproduction method of digital machines that scan in a copy of the original image once, digitise the image and store it and use this to reproduce many copies. By contrast, with analogue copiers, the image may have to be reloaded and "scanned" on a number of occasions if the number of required copies exceeds the capacity of the sorter bins.

**Scan While Print**

Enhanced version of scan once/print many that allows users to scan a copy job while the machine is in the process of printing (or outputting a previously scanned copy job). Some digital machines lack this capability and of those that have it, most are unable to scan more than one job ahead. It is handy for reducing contention on multifunctional machines when different people are trying to use the same machine.

**Simplex**

Refers to single-sided copying (in contrast with duplex, which is double sided).

**Sorter**

A multi-bin device for collating pages as multiple copies of multi-page originals are made. Typically used on analogue copiers working with ADFs and RADFs. Also used on digital machines lacking scan-once/print many technology. Note the number of bins (generally 10 or 20) and the bin capacity (generally 20 - 50 sheets). The number of bins generally represents the limit on the number of sets that can be copied in an uninterrupted operation.

**Stapler-Sorter**

A type of sorter device that staples copied sets automatically after the pages have been delivered to the bins. Typically used on analogue copiers working with ADFs and RADFs. As with regular sorters, the number of bins generally represents the limit on the number of sets that can be copied in an uninterrupted operation. Stapling

adds to job time - e.g. about 35 seconds for 20 sets. The maximum number of sheets that can be stapled generally varies from 2 to 50 sheets (it may be less than the capacity of the bins for unstapled sheets). The number of staples it can hold and choice of staple positions will also vary - less expensive models can only put in one staple in the top left corner of a letter size page.

Important: you need a multi-position stapler-sorter if you want to staple legal sets with the staple in the top left corner.

### T

#### **Touch Screen Display**

Touch sensitive user interface allowing users to program features through a series of menus and submenus when setting the machine up for a job. Touch screens are only as good as the software behind.

#### **Transparency Interleaving**

Feature that automatically inserts slip (white) sheets for separation purposes when copying onto transparencies. Makes handling copied transparencies much more manageable. A machine may give you the choice of copying onto the slip sheets or leaving them blank, or it may be able to do only one of those things. Also known in as "OHP interleaving"

### U

### V

### W

### X

### Y

### Z

#### **Zoom**

Reduction/enlargement feature allowing selection of the magnification ration, typically in 1% increments. Most analogue copiers offer a zoom range of between 60-140% and 50-200%. Digital models offer ratios of 25-400% and wider. Machines with zoom also have pre-set ratios.