

10. Special materials.

Plastics

Do not use heat tape with plastics as they become quite soft when heated and the tape can leave an indent in the plastic.

Always use special paper and always ensure the coated (printable) side of another piece of special paper (which can be reused) is in contact with the underside of the plastic. You must use 'special' as 'economy' or copy paper will stick to the plastic.

As soon as the press is opened, place something cold and heavy onto the plastic. Leave it there for 30 seconds or more. This will help prevent any distortion as the material cools.

Mugs

A Mega Mug Press (part 70-1200) is available to print our sublimation mugs. However, all the samples you will see in our literature, were produced in a normal domestic oven. Cut the printed image (special paper) to size and heat tape one end in position on the mug. Then pull the paper around the circumference of the mug tightly and heat tape at the other end. Then tape top and bottom and place in an oven (we have a range of laboratory ovens available) for 10 minutes at 210°C. This is all that is needed to sublimate mugs.

You may need a mug press if you wish to print the whole way round the mug (from handle to handle) as it is difficult to wrap a large design to a mug and maintain the pressure needed. Keep your designs relatively short and an oven is all that is needed.

Tee shirts and other fabrics

Mega supply Sublimation Canvas materials and Sublimation Tee shirts in various sizes.

When choosing other fabrics the white material should have at least a 55% Polyester content. The higher percentage of polyester the brighter and more vibrant the colour will be.

Before pressing fabrics with a printed image place the material in the hot press for a few seconds between a couple of sheets of unprinted paper. This will "pre-press" or "iron" the fabric. It will help remove creases and also pull together the weave of the fabric to produce a "tighter" material for printing. Do not use heat tape on fabrics.

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Sublimation



HINTS AND TIPS FOR SUBLIMATION PRINTING

1. Help maintain your Printer by using it regularly.

Just like any other ink jet printer, your Mega Sublimation System will benefit from regular use. The longer the printer is left idle, the more chance there is that you will have print head problems. As stated this applies to any ink jet printer – not just one being used with sublimation ink. **Always leave your printer turned on. This will raise the temperature of the ink and print head by just a few degrees and help prevent blockages and print problems.**

2. Clearing blocked Print Heads

1. To check the print quality of your machine, you can perform a 'Nozzle Check'. To do this, go to printer properties and select the maintenance tab. You will see the nozzle check and head cleaning options listed there. When you have performed a nozzle check, you have one or more tiny breaks on the printed 'nozzle check' sheet then, unless you are immediately printing a high resolution image, it maybe worth ignoring and a normal print run will often correct the problem.

2. If the print quality is poor, then initially perform two head cleans — **No more than two !** If a nozzle check still shows print problems, then turn the printer off and pull the mains lead out.

Leave the machine for 20-30 seconds, then power it back up and perform two more head cleans and a nozzle check.

3. Once again, if there are still print problems, power it off, remove the mains cable and leave for 20-30 seconds. Then power it up again and perform two final head cleans.

4. If after another nozzle check there are still print problems, then remove the ink cartridges, power the machine off and pull the mains cable out. Leave for 20-30 seconds, power it up again and put the cartridges back. You have just fooled the printer into thinking it is a completely new machine and it will therefore perform a complete power ink flush.

5. If at this stage you still have print quality issues remove the Bulk Ink Cartridges and fit the original Epson cartridges. Then perform a head clean and nozzle check with these fitted. If the Nozzle Check Pattern has printed OK then you know the print issues you have are with the Bulk Ink System and that the print itself is fine. Remove the Epson Cartridges (tape up the bottom of the cartridges with heat tape) and refit the Bulking System.

6. Another way of helping clear print head problems is to print the pure colour you are having difficulty with. To do this use the 'purge files' we supplied on a floppy disc. These are .tif files of strips of colour, cyan magenta, yellow, black etc. If you have problems with the cyan for instance, then you can use the cyan.tif file and only print that colour to help 'pull the cyan ink through' the system.

7. If you have done all of the above and you still have print problems, you may have to syringe the air filled 'foamy ink' through. Separate instructions are provided on how to do this in your installation guide.

8. Finally having completed steps 1 – 7 please call us for further advice.

3. Colour Matching

When you installed your system and set-up your print driver, you would have made changes to the print colours and brightness to give accurate colour rendition for the type of Mega Sublimation Paper you are using. These changes will provide perfectly accurate colours for the vast majority of applications. However, if you are trying to match a specific colour, for example a Company's corporate logo, then contact us regarding the complex world of 'colour profiles'.

4. Mega Sublimation Paper

Always keep your sublimation paper sealed in an airtight plastic bag. This is important to stop it curling. We produce two types of paper "Special" and "Economy".

Special Paper

If you purchase a Starter Kit you will have received a pack of Special paper. This paper can be used to print on any sublimation substrate and will release the optimum amount of ink to provide extremely deep, vivid colours.

There is often a blue watermark on the 'non-printable side of the sheets. A wet finger will not stick to this side, but it will to the coated printable side.

Economy Paper

This paper can only be used on a more limited number of sublimation substrates as shown on the laminated 'Sample Times' guide. The printable side is always whiter and will be indicated in the paper pack when opened. The coating on these sheets will not release as much ink as the special paper, resulting in colours that are not quite as deep and vivid.

Remember !! - with Epson printers the printable side of loaded paper always faces you.

5. Changing your Print Driver Settings.

When you installed your system, you would have set-up your printer driver for both 'Economy' and 'Special' papers. Remember to select the appropriate setting for the paper you are using before printing.

You will need to override the 'Flip Horizontal' or 'Mirror Image' setting if you are producing polyester overlays or glass trophies and cutting boards, as you will not want the image reversed.

6. Printing Images

If you want to print to the edge of your substrate, always oversize your design. A 5mm – 10mm 'bleed' will make it much easier to align your sublimation substrate with your printed design.

Your Sublimation paper has a coating which prevents too much of the ink absorbing into the paper. The ink needs to sit on top of the coating to enable it to sublime. The special paper has a superior coating which means very little will be absorbed into the paper. This in turn, means the printed image on special paper will never fully dry. An image on special paper should ideally be left overnight before use. Alternatively it can be placed in the heat press for

7. Choosing Substrates

Sublimation printing will produce excellent results on substrates that have a Polyester or PVC content. Materials can be solid Polyester or PVC or have a Polyester coating applied to them. The exception is our 'patent pending' Anodized Aluminium Sheets, which are a special open pored aluminium. Mega produces a whole range of materials that will yield excellent results every time. Please ask for our latest priced booklet on available materials.

8. Preparing Substrates

Some of the sublimation substrates such as the polyester coated metals and gloss coasters have a protective film on the printable side. This should be removed before use.

With the exception of textiles and plastics, it is always good practice to secure the sublimation substrate to the printed image with heat tape. At the end of the pressing cycle, when the lid of the press is raised, the sublimation process will (briefly) still be occurring. If an un-taped printed image moved a 'ghost image' could result – hence the benefit of using heat tape.

9. Pressing

Please read the separate instructions for the press you have purchased.

Take care when using a heat press – the heated platen can reach temperatures over 200°C.

Before loading the press with a printed image adjust the pressure of the press for the substrates you are using. Close the press on your substrate to test the pressure. The press should 'snap-shut' when applying a moderate force. If there is no 'snap' when closing there is not enough pressure and if you have to push really hard to close it – that is too much pressure. You will soon realise what is the optimum setting.

Please note: You can only adjust the pressure wheel when the press is open.

Refer to your separate laminated 'Sample times' guide for specific advice on the material you are using. It will tell you which way up to print your material. For instance, coasters and mouse mats have the printable surface facing the heat, but tiles and coated aluminium sheets are heated through the back of the material.

It is also a good idea to place a piece of paper on top of and underneath your printed image and substrate. Experience has shown that for those who wish to 'experiment' with different substrates, it is better to make a sticky mess between two pieces of paper, than on the heat press itself!. This paper also helps keep the press clean. You will see below that when printing plastics *special paper* should be used for the above 'sandwich'.

Take care when removing printed images from the press. It is a temptation to view the result immediately, but it will be very hot and it is always a good idea to allow it to cool before handling.

Lastly, do not worry if you get any ink on the rubber base pad. This will soon lift off onto the paper 'sandwich' described above.