DYE SUBLIMATION PRINTER APPLICATIONS: INTERIOR DECOR

CASE STUDY
Digitally-printed interior decor is transforming the spaces we live, work and play in. Epson’s dye-sublimation technology makes it easy and affordable to produce bespoke interiors.

In today’s personalised, customised world, digitally-printed interior decor is transforming the spaces we live, work and play in. Whether at home or in the office, Epson’s dye-sublimation technology makes it easy and affordable to produce bespoke interiors in stunning quality, on-demand and in small quantities.

The choice of printable materials is growing fast and designers can carry their creative vision into all corners of the interior environment, from curtains to cushions, tables to teacups, sofas to shower curtains. If you can imagine it, you can print it....

You can print these products, and many more, with any of Epson’s wide range of dye-sublimation printers. Produce them on materials that are difficult to handle using other, traditional printing processes — not only a wide variety of textiles, but also metal, plastics, glass, MDF boards and ceramic tiles.

The special nature of the dye-sublimation process means that whatever you produce will be high-impact and high-quality, with more vibrant colours and images will be reproduced with a stunning photographic quality and clarity.

No wonder there’s a buzz about dye-sublimation. Here are a few ways to print for versatility — with a single dye-sublimation system you can print and customise all kinds of interior décor products.

Reach out to new opportunities

What’s more, it isn’t difficult to get into dye-sublimation printing with Epson’s range of affordable, easy-to-operate solutions available. These bring exciting new opportunities within reach of anyone in the business of creating or producing interior decoration with impact. You may be a sole entrepreneur starting out on a new venture, an interior design business excited by the creative potential of digital décor, or a hotel brand creating unforgettable spaces for guests. You may already be in the printing business and wanting to add new, higher-margin revenue streams.

This guide explains the basics of how dye-sublimation works and some of the things you can create using dye-sublimation. New products are
being added all the time, so the list isn't complete, but it gives you an idea of what's possible with this most flexible process. Finally, it looks at how the Epson SureColor SC-F Series delivers an unmatched combination of quality, performance and reliability to the thriving dye-sublimation printing community.

What makes dye-sublimation so different...

The main way is that the ink penetrates the substrate instead of just coating its surface, creating high-resolution, permanent images. It does this through a chemical reaction in which heat turns the ink from a solid to a gas that permeates the material, which has to be polyester or polyester-coated. The heat causes the pores to open and accept the gaseous dye; when it cools, the pores close, fusing the image.

If you think being restricted to printing on polyester substrates limits dye-sublimation’s applications, it doesn’t — if anything, it's the opposite. In practice, you print the image onto a dye-sublimation transfer paper then use a heat press to apply the paper to whatever you’re printing — which can be anything from coffee mugs to cushions, vases to aluminium panels, upholstery to tabletops, chairs to curtains. As long as what is being printed contains, or is pre-coated with, enough polyester, it will accept vibrant, high-quality images and text that are durable and scratch-resistant. In the case of textiles, the ink is so completely absorbed into the material that the 'handle' of the fabric — the way it feels and falls — is unaffected. Run a hand over textiles printed using the dye-sublimation process and you simply can’t feel the image.

Just fill in the blanks...

What often surprises newcomers to dye-sublimation printing is the sheer number of 'dye-sub-ready' materials and items just waiting for someone to print on them. Textile manufacturers offer a wide range of printable fabrics that enable you to simulate different materials, from silk to satin to voile. Print-ready 'blanks' are available for almost every item you can imagine, and decoration systems are now coming to market to decorate 3D items. Your chosen design can be simply printed on special thermoforming film, which is applied to the 3D object. This is then heated and the design is transferred to the object through pressure and heat. This can be done on everything from cutlery and vases to lamps and lampshades — even home entertainment systems and computer game consoles.

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In the future we are going to encounter dye-sublimation printing in more and more areas of our lives. On a room-by-room tour of a typical home we might encounter any of these items, each customised to convey the personality of its residents, capture a particular mood or theme, or recreate a favourite place.

- In the living-room: Curtains, cushions, sofas, stools, chairs, tables, vases, beanbags, lamps...
- In the kitchen: Worktops, cupboard doors, fridges, aprons, plates, cutlery, glassware, tea towels...
- In the bedroom: Curtains, pillowcases, duvets, throws, lampshades.
- In the bathroom: Shower curtains, towels, washbasin surrounds...

**Dye-sublimation the Epson way**

Epson’s SureColor SC-F Series offers two ways to get into dye-sublimation — the SC-F6000 and SC-F7100. These printers have been developed without compromise to deliver exactly the benefits our customers need. They are also 100% Epson, which means that all the components, from ink and printhead to printer chassis and optional accessories, are designed and manufactured by Epson. The result is that quality, performance and reliability are optimised in the SureColor SC-F Series to deliver maximum productive uptime and profit at a low Total Cost of Ownership.

At 44 inches wide, the SureColor SC-F6000 is ideal for low- to-medium volume print runs. The perfect entry-level printer for dye-sublimation, you will quickly be producing smaller-format soft furnishings and furniture items, as well as the full spectrum of other customised products. Features include a print speed of around 30m2/hr, a compact footprint for easy installation in most production environments, and single-operator loading of easy-to-change media rolls.

The 64-inches-wide SureColor SC-F7100 brings higher productivity, larger formats and medium- to-high volume print-runs within reach. Its maximum output speed of 58m2/hr (30m2/hr in two-pass mode) is backed up by a post-platen heater and enhanced take-up reel for high drying speeds.

Both printers use Epson’s UltraChrome DS ink, specially developed to produce outstanding images with vibrant colours, intense blacks, sharp contours and smooth gradations. They also give you control over the hue or tone of the black — for example, by adding other colours to create warm or cool blacks.

The SC-F7100 is also offered with the ErgoSoft RIP providing a complete set of production tools for digital textile applications. This includes the GPS Profiler and built-in profile downloader, which gives instant access to many optimised profiles — so that you can start your dye-sublimation business on day one.

The SC-F6000 is supplied with the Epson F6000 Exclusive Edition of the Wasatch SoftRIP software to help achieve optimal results.

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