

## Dye Diffusion Thermal Transfer (D2T2)

This process employs a set of ribbons that are coated with a dye that is transferred to the receiver sheet by the application of heat and pressure from a stylus at a discrete point. The dye will sublimate and migrate to the substrate, where it will be chemically bound in a receptor coating.

Compare this process with: [Fuji Pictography](#), [Light Exposure to Silver Halide Paper](#), [Analog Photographic Print](#)

**Other Given Names:** Thermal Dye Sublimation, Dye Sub, Thermal Dye Transfer (TDT)

**Dates:** since 1986 (Hitachi VY 50A printer), Kodak since 1989 (XL 7700 printer)

**Colorant:** for color prints: yellow, magenta, cyan, and occasionally black dyes; for black and white prints: either the three color dyes in equal quantity or a single black dye

**Medium:** RC paper with many extra coatings to receive the dyes from a donor ribbon. The medium has the basic structure and feel of photographic RC paper.

**Surface:** glossy. Eastman Kodak printers manufactured later than 1994 had the capability of applying a UV and fingerprint protection laminate over the image, the edge of which can often be made out when viewed in specular light at the edge of the image. The surface is easily scratched.

**Inscriptions:** Eastman Kodak Co. medium has the words "Kodak ELECTRONIC IMAGING PAPER" in gray diagonal letters on the verso. Shinko paper has "DYE SUBLIMATION PAPER", and Mitsubishi L-Size (4x6") has "LL" in gray diagonal letters on the verso.

**Formats:** [Contribute to this category!](#)

**Image Quality:** continuous tone, photographic quality, to the naked eye indistinguishable from photographic prints. Under magnification a regular grid of faint, diffuse-edged squares or lines is distinguishable. Color misalignment of the Y, M, and C dyes, visible under slight magnification, is common. Blank spots caused by dust between medium and ribbon during printing may be present.

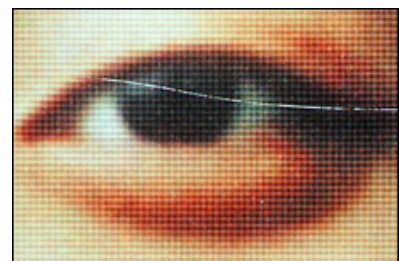
**Applications:** proofing, photographic studios, retail stores, video printers



*Kodak Digital Science with CMYK ribbon (RC paper, dye sublimation), 30 x magn.*



*Shinko Color Stream with CMYK ribbon (RC paper, dye sublimation), 30 x magn.*



*Shinko Color Stream with CMY ribbon (RC paper, dye sublimation), 30 x magn., scratched surface*

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