

Our Imaging Process for Ceramics & Other Special Substrates.



The dramatic reproduction of the vivid colors in the artwork of Dave Whitlock and Jeff Currier is possible through the process of Dye-Sublimation Transfer printing, which is used by Freshwater Studio. After the artwork is digitized, the resulting image is color-corrected for dye-sublimation ink and sized for the items being printed. The image is then printed on special transfer paper using a heat sensitive sublimation dye in solid state, which is suspended in a liquid. The printed image is then positioned on the item to be imaged and both are placed in a heat press. At 400°F, the solid dyes in the print convert into a gas without ever becoming liquid. The high temperatures also open the pores of the polymer coating which allows the gas to enter. When the item is removed from the heat press, the temperature drops, the pores close, and the gas returns to a solid state. The dye has now become a permanent part of the polymer coating.

Unlike silk-screening and heat transfer where the image sits on the surface of an item, Dye-Sublimation Transfer printing bonds a heat sensitive ink with a polyester or polymer surface. Because the image is part of the surface, it will not peel, crack, or wear off. Care should be taken, however, to prevent scratching the surface of ceramic items.

All of the images from our artists are available in a variety of formats, Mugs, Individual tiles & Multi-tile murals. We use matte & tumbled stone tiles. The tiles are available framed in solid Oak or unframed. The frames we use are US Made. We do all of our imaging work in Dillon, MT as of August 2005.