

Quality of Recycled Paper

The quality of recycled paper and environmentally preferable printing processes has improved dramatically in recent years. Modern deinking technology produces high performance recycled paper that meets the same technical specifications as virgin papers. Therefore, the notion that virgin-fiber paper is of better quality than recycled paper is just another myth.

Eco-paper products are available in a wide variety of brightness, opacity, and smoothness levels, satisfying all publishers' needs. Just about all paper companies produce some papers with post-consumer recycled content. Magazines on the market today with recycled content range from 30- and 40-percent post-consumer recycled content to as much as 100% post-consumer recycled content and look great.

CoatingsAs a visual medium, it goes without saying that a magazine's look is an important selling point. For most magazine publishers achieving the desired look means using a coated paper. However, coatings introduce a specific set of environmental concerns, particularly as they complicate the recycling process.

There are different types of coatings, separated not only by composition but also by function. Clay coating is applied at high-pressure to add a glossy finish or shine to magazine paper prior to printing. This coating improves the opacity of the paper, helping to prevent any bleeding through of inks. The vast majority of magazines currently use this type of coated paper. A second coating is sometimes applied after printing to seal the inks onto the paper.

Why Are Coatings ProblematicWhen magazines are discarded for recycling, the clay and final sealant coatings act as contaminants in the recycling process and must be fully separated from the paper. Complete separation is not always easy, and failing to remove coatings from the mix results in the production of low grade recycled paper. A final sealing coat adds an additional level of contaminants that must be removed during recycling. Sealants often contain polymers (plastic-type substances), which are even more difficult to separate from paper. This final coating is also potentially harmful to the environment, as its application can result in the release of Volatile Organic Compounds (VOCs), which are suspected carcinogens and contributors to ozone depletion. UV coating also guzzles tremendous amounts of energy, calling for intense heat and a UV light source.

Both clay and UV coatings reduce the recyclability of magazine paper. Deinking mills tend to accept less coated paper because when the paper and clay are separated, the quantity of clay nearly equals that of the usable paper fiber. For these reasons, coated and re-coated magazine paper is less than desirable from the viewpoint of deinking mills.

To Coat or Not to CoatThe best environmental choice is to go with an uncoated paper whenever possible. There are uncoated paper options available that contain as high as 100% post-consumer recycled content, and maintain superior print quality. Publishers should try to avoid using the second UV coat. If your paper must be coated, make sure the coating is VOC-free, or a non-volatile varnish. For a greener publication with maximum sustainability:

- Work with our experienced sales associates to find uncoated magazine paper. High quality matte finish products exist that will improve your publication's readability, maintain appeal and make it more recyclable.
- If altogether avoiding coated paper is not an immediate possibility, get rid of the extra recycling hassle of a sealing coat. Eliminating polymers from the mix makes magazine recycling more effective.
- If a final sealing coat remains necessary, commit to using VOC-free options. Choose a non-volatile varnish and/or water-based coating. Printers can help determine what eco option makes the most sense. For information on coats and finding the best choice call us at 412-243-9060