

Protecting Our Environment

WHAT OTHERS ARE DOING ❖ HOW YOU CAN HELP

Turning Yesterday's Old Newspaper Into New

(NAPSA)—Paper recycling is turning a page in the newspaper business. Each year in the U.S., more than 80 million tons of paper are produced, and because to make paper, cellulose fibers from either wood or wastepaper are needed, paper recycling is the key if we want to use less wood and protect our forests.

High-Quality Paper

Further good news is that with modern techniques, even high-quality papers and tissues can be made from 100-percent recycled paper. But this requires enormous amounts of recycled paper, as the raw material and—in most cases—this wastepaper has been printed on. The question is, therefore: How can yesterday's old newspaper be turned into fresh new paper for printers, tissues or tomorrow's newspapers? The solution is to remove all the old printing inks from the wastepaper, letter by letter, using a process that paper manufacturers call "deinking."

During the deinking process, wastepaper is shredded and then placed in a watery chemical solution that removes the colored ink particles from the cellulose fibers. This deinking solution is primarily composed of caustic soda, sodium silicate, peroxide and soap. To be effective, however, the deinking chemicals require long processing times to bond with the ink particles and eventually separate them from the cellulose fibers. Thankfully, once the fibers have been cleaned, the majority of these chemicals are simply broken down during the course of the processing.



Less water is now needed to turn old paper into new, thanks to improved techniques.

But all this takes a lot of water. Now Less Water Is Needed

Happily, the water volumes needed to make a kilogram of packaging paper can now be reduced from 10 to two liters, thanks to improved techniques—such as those developed by the paper-machine manufacturer Voith. With the aid of such innovative technologies, significant savings of resources and more efficient use of recycled materials are indeed possible. Here, the Voith Paper company plays a leading role in developing environmentally friendly technologies—cutting both the amounts of water as well as electricity needed to manufacture paper. That's one reason why today's paper industry can honestly claim to be significantly more ecological than it was 10 years ago, even though it produces an enormous amount of paper to satisfy daily demands of the U.S.

To learn more, visit the Web site at www.voithpaper.com.