NONWOVEN

DISPERSIBLE, BIODEGRADABLE AND PLASTIC-FREE WIPES

ANDRITZ Wetlace™ TECHNOLOGY



ENGINEERED SUCCESS



PLASTIC POLLUTION A threat to our environment

MARKET SITUATION

Our environment is threatened by synthetics and plastics, and the so-called ban on plastics is a frequently debated topic. A throwaway attitude, poor communication and wrong and misleading labeling of wipes lead to blockages in sewage systems and a threat to the environment. This is why dispersibility and biodegradability have become one of the major targets for wipes producers when it comes to Moist Toilet Tissues (MTT).

State-of-the-art MTT wipes are made from fully biodegradable fibers, have adequate strength while in use, and then disperse quickly in municipal sewage systems. The ANDRITZ Wetlace™ technology is the perfect answer to these demands.

CORRECTIVE STATEMENT

As a matter of fact, there are many kinds of wipes sold, but only less than ten percent are toilet wipes and marketed as being "flushable". The vast majority of wipes, such as

baby wipes, disinfecting wipes, hard surface cleaning wipes, make-up remover wipes, and many others, none of which are marketed as being "flushable", are the real contributors to wastewater system blockages and environmental pollution. But only flushable wipes are being blamed for causing blockages in pumps and pipes and for being a primary contributor to the dreaded fatberg. Indeed, flushable wipes are actually the solution to the above mentioned issue and not the cause.



Dispersion of wipes produced by the Wetlace $^{\text{TM}}$ technology

Invest in the future and a greener environment

OUR MOTIVATION

The rising threat of plastic pollution, sewage system blockages, and stricter regulations from the government and trade associations propelled us to search for the ideal production technology for fully dispersible, biodegradable and plastic-free wet wipes. The response is the ANDRITZ Wetlace™ process. Furthermore, the use of wood pulp results in cost-effective production because the raw material accounts for approx. 70 percent of the total production costs.

However, this topic concerns not only us as machinery supplier, but also the entire industry and supply chain comprising raw material suppliers, roll goods producers, finishing and converting companies, retailers, and finally the end user. Supporting industry activities helps to create awareness for all parties and can start to change how end users behave. Together, as one industry, we can create new production technologies, like WetlaceTM, to focus on a greener environment and a brighter future.



- Institutes involved / suppliers to wipes production
- Supply chain for wipes production
- Supporting industry activities



ANDRITZ neXline wetlace production line for dispersible and biodegradable wipes

CHALLENGES OF A DISPERSIBLE WET WIPE

These wipes must have excellent tensile strength because they are pulled through the different stages of production, wetted and packed during the conversion process, and the end-user expects to have a wipe that doesn't disintegrate before or during use. Once flushed however, this stability has to disappear entirely so that the product will virtually dissolve in the sewage water system. Finally, the fibers needs to be biodegradable, which means that they do not harm the environment.

HOW DO YOU MAKE WIPES THAT DISPERSE IN WATER AND DON'T BLOCK THE SEWAGE SYSTEM?

The main impact comes from the fiber blend of wood pulp and man-made cellulosic fibers, web forming on the inclined wire, and mechanical bonding by the hydroentanglement unit. Wetlaid forming is perfect in terms of achieving excellent web uniformity and product quality. Hydroentanglement ideally complements the wetlaid technology by entangling the fibers without any chemical binders or thermoplastic fibers.



GET THE MOST OUT OF YOUR INVESTMENT

At ANDRITZ Nonwoven, we know that your business depends on satisfied customers and efficient processes. That's why we support you in every aspect of your nonwoven production. Take advantage of technology that lets you produce consistent quality for decades to come. Profit from the highly efficient use of energy and raw materials that our production provides. You can rely on our responsive service teams, who will protect your investment and optimize your processes. Experience how innovative approaches and digital services give you more control than ever before. With ANDRITZ, the leading supplier for the nonwovens market, you get the most out of your investment.

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