

Title:

LENZING™ Web Technology – nonwoven innovation meets sustainability

Abstract:

The responsibility on preserving our environment for next and future generations was lately underlined by the EU with the single use plastics directive and caused a strong and rising need for innovative 100 % biodegradable nonwoven solutions. For this industry partners across the value chain and also in the end consumers will be able to benefit from LENZING™ Web Technology - a new upcoming pioneer technology producing cellulosic nonwoven fabrics based on botanic wood pulp. The technology produces fabrics made of 100 percent continuous lyocell filament and with this it combines two nonwoven worlds that so far were in contradiction to each other: the flexible and versatile spunmelt process and the sustainable and functional lyocell process.

It offers a unique self-bonding mechanism where filaments bind into a fabric during the laydown process. Also it offers a broad filament diameter range, ranging currently from 5 to 40 µm and a basis weight range of 15 to 80 gsm. The combination of all of this leads to a technology platform being able to produce a product range with a much wider variety of surface textures and dimensional stability than which can be currently achieved with other nonwoven technologies. On top of that the fabrics are water absorbent and set new standards to fabric purity by being finish free and chemical binder free.

The flexibility of the technology and the new and versatile fabric properties will allow to offer tailored cellulosic, certified biodegradable nonwoven solutions for a wide range of application fields - from the durable to the single use nonwovens sector.