

BioHighloft – Biobased Highloft Nonwovens

Problem / Motivation

- Systematic development of biobased spunbonded nonwovens with the aim of higher quality thermal bonding and significant improvement in textile feel and softness
- It is important to minimise shrinkage and brittleness of biopolymer nonwovens and to maximise its strength and elasticity
- In addition, volume and surface sealability are to be improved

Solution

- Sustainable, soft comfort spunbonded nonwovens built on biobased polymers using
 - Semi-highloft – calendering with open-dot engraving
 - Full-highloft – hot air without calendering: Hot Air Knife (HAK) and Hot Air Field (HAF)
 - Extra-highloft – excentric core/sheath and low-pressure area engraving (XHL)
 - 3D embossing
- Bico spinning processes side-by-side and excentric core/sheath are used to produce crimped fibres
- Areas of application are primarily hygiene industry and medical textiles

Project Launch

04/2024

Project Partner

currently none, open for enquiries



Crimped filaments made of PLA/BioPE



Spunbond Technology Centre for nonwoven development

Acknowledgement

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