

RUBIO – Regional entrepreneurial alliance for the development of value chains for technical bioplastics in Central Europe

Problem / Motivation

- Holistic investigation of bioplastic polybutylene succinate (PBS) from basic material to industrial usability within the network
- Qualification of the biopolymer as substitute for PE in a wide range of applications
- Tasks of STFI in this joint project:
 - Research into production possibilities of PBS spunbonded nonwovens
 - Development of textile technology fundamentals for processing of PBS film and nonwovens into grid- and net-like structures for the agricultural and packaging industry

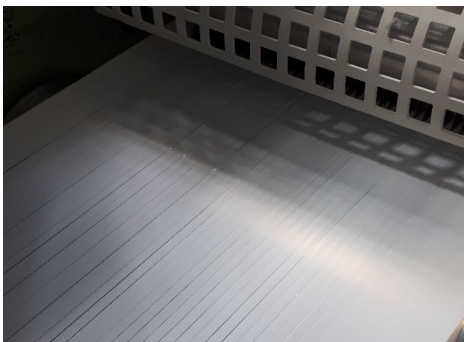


Solution

- Research into opportunities and limits in technological processing of PBS materials (granules, films, spunbonded nonwovens, tapes) into textile end products
- Investigations into processing behaviour of granules into spunbonded nonwovens
- Investigations into cutting and stretching of PBS films into tapes and subsequent web production on warp knitting and weaving machines
- Investigations into cutting of PBS spunbonded nonwovens into tapes and processing into knitted fabrics

Project Launch

09/2021



Cutting of spunbonded nonwovens to tapes

Project Partner

18 partners from Saxony, Saxony-Anhalt, Thuringia, Berlin and Brandenburg (six small and medium-sized enterprises, seven large companies and five research institutions)



Grid made from spunbonded nonwoven tapes



Acknowledgement

We would like to thank the Federal Ministry of Education and Research for funding the research project RUBIO (Reg. No. 03RU1U24B) within the funding programme "RUBIN – Regionale unternehmerische Bündnisse für Innovation".

