

Dust to Wetlaid – From waste to product: Innovative wet nonwovens made from fiber dust

Problem / Motivation

- **Unused potential** - fiber dust from textile production is currently only used via thermal recycling, however it offers a promising source of material
- **High quantities available** - estimated to be several hundred thousand tons of textile dust fractions of varying composition
- **Resource efficiency as motivation** – integration of defined waste into sustainable and value-adding circular usage with the possibility of developing new products
- **Technological opportunity** – due to the particle properties, the wet fleece process in particular offers high potential as a suitable procedure

Solution

- Development of engineering basics using textile dust in process to generate non-woven fabrics
- Investigations relating suspension stability when using various fiber dusts
- Sample production for various applications (packaging, filters, insulation materials)
- Design of a split manufacturing process (wet fleece carrier substrate and impregnation of dust suspension)

Project Launch

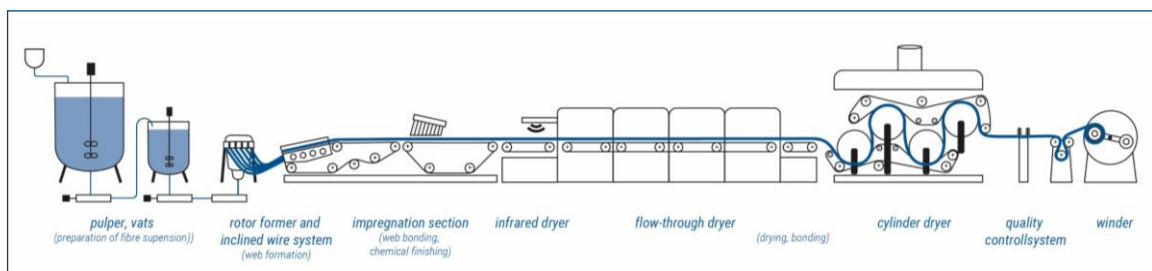
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Project Partner

Available for inquiries



Textile fiber dust



Schematic depiction of the wet fleece system at STFI

Acknowledgement

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