



WIPANO

Gefördert durch:



Bundesministerium
für Wirtschaft
und Klimaschutz

aufgrund eines Beschlusses
des Deutschen Bundestages

Increased performance of warp knitting machines through innovative weft feed elements

The processes and machines used in warp knitting are characterized by a stitch-forming process. In addition to the stitch-forming yarns, weft yarns can be inserted into the knitted fabric, which often represent the process limitation in terms of speed. In this described process, one mechanical drive component

The aim of this project is to develop and validate new weft feed elements that connect the familiar weft feeder with the knitting machine's clamping plate. All warp knitting technologies can benefit from the new weft insertion system. Based on these results, a pilot system with marketable products can be developed from the prototype. The development of new, highly productive products can also follow on from the project.

The patent of the Niederrhein University of Applied Sciences "Feed element for a warp knitting machine and warp knitting machine" (DE 10 2019 128 607 A1) provides the basis for a new process using the innovative feed elements, which is more energy-efficient, resource-saving and therefore more productive and economical.

Acknowledgement

The project "Increasing the performance of warp knitting machines through innovative weft feed elements" (03THWNW003) is funded by the Federal Ministry of Economics and Climate Protection (BMWK) as part of the funding measure WIPANO - Knowledge and Technology Transfer through Patents and Standards. We are very grateful for the funding.

Duration

01.08.2021 – 30.11.2023

Info material

Brochure about ITMA

Contact



Prof. Dr.-Ing. Marcus O. Weber

Textile Technology, in particular Technology of Knitting and Knitting Mills; focus on TUB/Textile Management

- Raum: E 308 (Webschulstr. 20)
- Telefon: [+49 2161 186-6033](tel:+4921611866033)
- [marc.weber\(at\)hs-niederrhein.de](mailto:marc.weber(at)hs-niederrhein.de)