



**Elastics – from raw material to yarn,
processing, and application**

Elastic Yarns and Textiles

Co2Tex: Book release – 13 December 2024



The BIOTEXFUTURE project Co2Tex, deals with research on elastic yarns with the aim of developing melt-spun elastic yarns from thermoplastic polyurethanes. This exciting project has now resulted in a book by deputy project leader Dr Jan Thiel, which will be available as of 13 December 2024.

In terms of textile technology, textile elasticity refers the provision of stretch and recovery on demand. It is one of the most important textile properties, as it has a direct effect on the overall functionality of many textile products. It is textile elasticity that opens up various areas of application in special and mass-produced products, particularly concerning stretch and compression. Many of the clothing textiles produced today, as well as almost all medical textiles, contain special elastic yarns that enable or reinforce textile elasticity.

The edited work describes and explains the production of elastic textiles, from raw material to fiber and yarn, processing, and application. Environmental aspects (e.g. recycling) are also covered. Expert contributions from industry and research present the state of the art and practical new developments in such a way that users from industry and trade can apply them in line with market requirements. In addition, trainees, and students as well as textile experts are addressed.

The book offers an in-depth exploration of elastic yarns and textiles, covering their properties, production methods, and applications. Topics include spinning technologies, state-of-the-art elastane, thermoplastic polyurethane, and polyamide yarns, as well as combination yarns and quality control. The book delves into elastic fabrics in knitting, weaving, dyeing, and medical technology, alongside innovations like shape-memory polymers and renewable resource-based yarns. It also addresses market trends, recycling, and the role of elastic textiles in workwear, making it an essential resource for industry professionals and researchers alike.

From December 13, you can buy the reference book from [Hanser](#) or via the QR code below.



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