

## New knitting process for the processing of medical yarn

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Weft knitted fabrics process high potential for wound dressing, therapeutically plasters or implants due to their elastic behavior. The used materials are impurified during the production process and afterwards mechanically and chemically stressed during the washing process.

Within a project the knitting machine technology is adjusted for the save processing of medical yarns. Medical fabrics are produced and analyzed. In a first step, a test bench has been developed which simulates the real knitting process. The test bench enables the analysis of machine components and oils.

The built-up of the test bench is based on the dial of a Double Jersey knitting machine (Figure 1). The needles on the dial rotate, guided by the cams tracks of the cam system. The fineness of the test bench is divided into segments ranging from E16 – E36. Parameters like temperature, velocity, oil consumption and torque can be measured and evaluated. With the help of this data, the material behavior over time is analyzed.

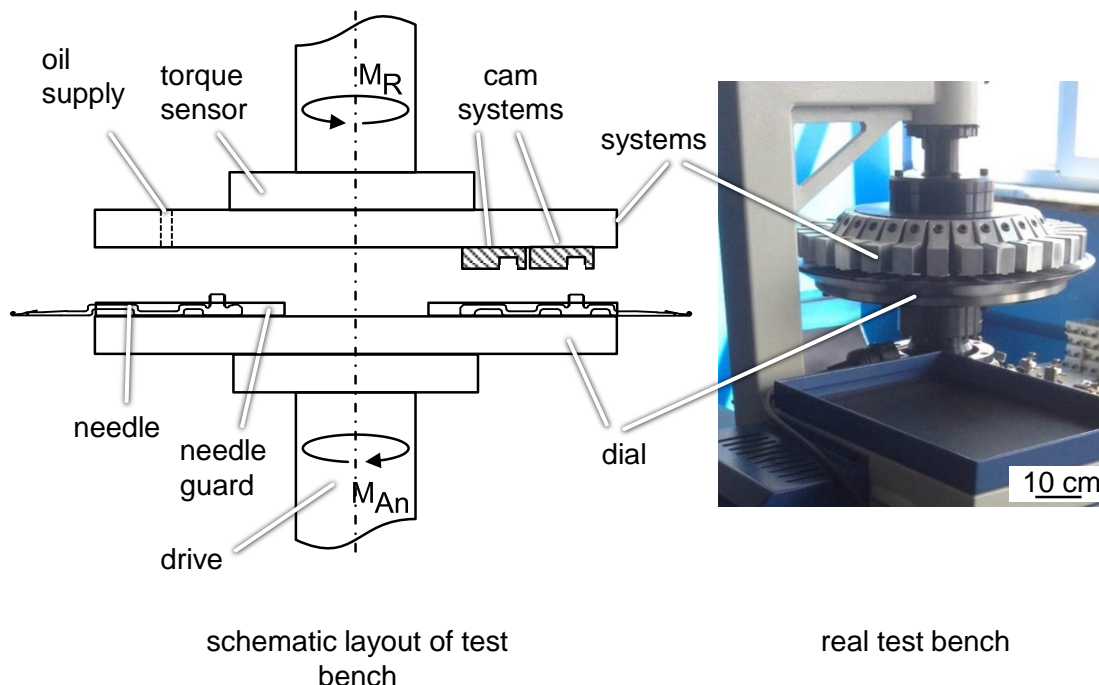


Figure 1: Built-up of the tribology test bench