**ContElon**

**Device for Detailed Analysis of Structural Quality of the Yarns**

**PRINCIPLE:**
- Continual measurement of instant relative elongation of small parts of the yarn under constant load
- Results are achieved by precise and dynamic measurement of tension force in yarn and angular velocities

**POSSIBLE ANALYSIS:**
- CPB, CVL for analysis of unevenness and periodicity of relative elongation (mechanical / structural property) of the yarns
- Statistics, comparison with other measurements
- Statistical trends
- Direct analysis of measured data
- Multi-yarn experiments – sets of experiments with different yarns and measurement conditions
- Yarn diameter (its projection in 1 dimension) is measured and can be analysed together with relative elongation as an additional quantity
- Export of both measured and calculated results to different formats (text file, Excel, FlexPro...) for further analysis in third-party SW
CONTIENT

APPLICATIONS:
- Reverse analysis of the technological system in order to locate possible causes of the high deviations of yarn relative elongation
- Analysis of the defects in the mechanical structure of the yarn package
- Identification of textile fabric appearance defects, prediction of the impact on the textile fabric like streakiness etc.
- Simulation of the mechanical properties during warping, weaving, knitting...
- Much more detailed view on the monitored deformation properties and on the technological context (rotor, air-jet yarns...)
- And probably many others...