

## References

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## INSTITUTE OF BIOPOLYMERS AND CHEMICAL FIBRES

### LABORATORY OF METROLOGY

The **Laboratory** is active in testing fibres, yarns, textiles and medical products. The usability and physico-mechanical properties of textiles and medical products are tested in accordance with European EN, International ISO and Polish PN standards.

#### Tests within the accreditation procedure:

- linear density of fibres and yarns
- mass per unit area using small samples
- elasticity of yarns
- breaking force and elongation of fibres, yarns and medical products
- loop tenacity of fibres and yarns
- bending length and specific flexural rigidity of textile and medical products

#### Other tests:

- for fibres
  - diameter of fibres
  - staple length and its distribution of fibres
  - linear shrinkage of fibres
  - elasticity and initial modulus of drawn fibres
  - crimp index
- for yarn
  - yarn twist
  - contractility of multifilament yarns
- for textiles
  - mass per unit area using small samples
  - thickness
  - tenacity
- for films
  - thickness-mechanical scanning method
  - mechanical properties under static tension
- for medical products
  - determination of the compressive strength of skull bones
  - determination of breaking strength and elongation at break
  - suture retention strength of medical products
  - perforation strength and dislocation at perforation

#### The Laboratory of Metrology carries out analyses for:

- research and development work
- consultancy and expertise

#### Main equipment:

- Instron Tensile testing machines
- Electrical Capacitance Tester for the determination of linear density unevenness - Uster Type C
- Lanameter



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