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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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