



Łukasiewicz
Institute
of Aviation



**CENTER
OF MATERIAL
AND STRUCTURAL
TESTS**

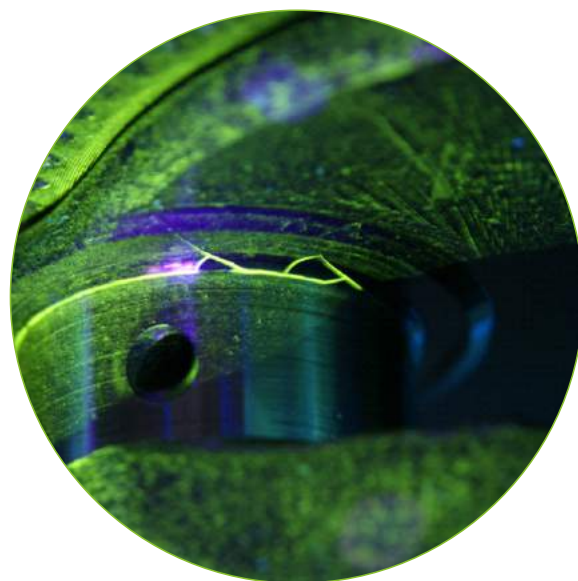
CHARACTERISTICS

Center of Material and Structural Tests at the Institute of Aviation is a Leading research facility specializing in material and structural testing for the aviation industry.

KEY FEATURES

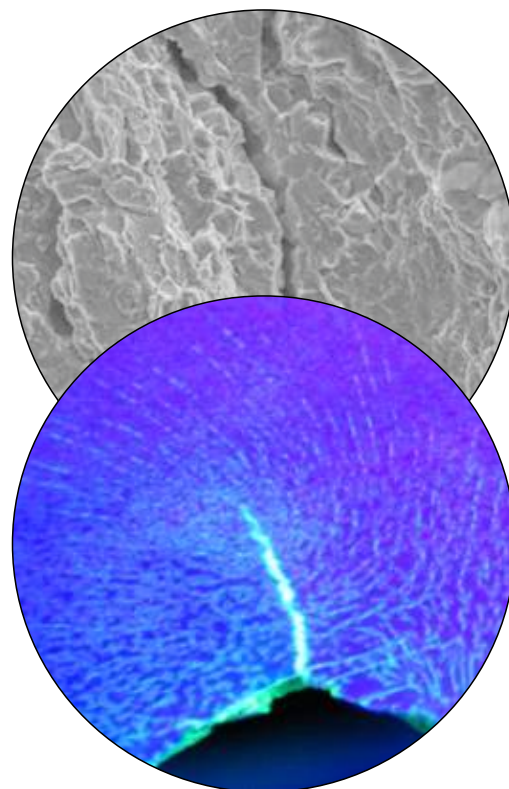
- Material Testing: Evaluates mechanical properties, durability, and performance characteristics of aviation materials through tests like tension, compression, bending, fatigue, impact (najważniejsze zakresy), and fracture toughness. (creep, 36 standów, temperatury i KN).
- Structural Testing: Expertise in static and dynamic testing of critical aircraft components, assessing structural integrity, load capacity, and fatigue behavior, ground vibration tests and acoustic testing on site, or at customers' premises.
- Preparation of specimen samples.
- Landing gear testing: Provides thorough landing gear, suspension and brake systems testing using drop towers and presses.
- Non-Destructive Testing (NDT): Utilizes advanced techniques like radiography, ultrasonic testing, eddy current testing, magnetic particle inspection, and liquid penetrant inspection to detect defects without damaging components.
- Research and Development: Drives innovation and develops new testing methodologies in material science, structural mechanics, and collaborates with industry partners and research organizations.
- Certification Support: Provides comprehensive assistance for certification processes, including test plan development, adherence to international standards, and preparation of detailed compliance reports.
- Consultancy and Training: Offers consultancy services for material selection, testing strategies, structural analysis, and certification requirements.
- Provides specialized training programs and workshops.
- Dedicated to safety and reliability: Contributes to the advancement of aircraft structures through cutting-edge testing capabilities and world-class expertise.

Please note that this summary includes only the most crucial information regarding the Center of Material and Structural Tests at the Institute of Aviation, focusing on the services provided and the dedication to ensuring the safety and reliability of aircraft structures, and our full offer exceeds further. If you have any inquiries do not hesitate to contact us.



CERTIFICATES

- AB 792 – PN-EN ISO/IEC 17025:2018.
- S-400 – GE Aviation.
- Pratt & Whitney mechanical tests certification.



The Łukasiewicz Research Network – Institute of Aviation

offers a wide range of specialized research, engineering services and products. We provide comprehensive solutions, ranging from dedicated analyzes, simulations, engineering design, through the selection, testing and certification of materials and structures, to rapid prototyping and additive manufacturing.

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