

ADDITIVE LAB WIRE-BASED ADDITIVE MANUFACTURING

*Research and
Innovation Lab*



TRANSPORT AND
TELECOMMUNICATION
INSTITUTE

Unique Lab for Baltics Scope

TSI AdditiveLab is a brand new laboratory, totally unique for Baltics scope, that is focused on the research and development of 3D metal printing technologies or WAM (Wire Additive Manufacturing). Industrial robotics equipment, controller software and research of the 3D printing processes are the main fields of the lab's work. TSI AdditiveLab is a lab that provides research, solutions and collaborative offers in various industrial sectors – transport, aviation, general industries, etc.

Collaborate with our team to explore the potential of WAM for your specific tooling and fixture needs. Our services include:

- Print-on-demand 3D metal printing technologies, WAM
- Software development and solutions
- Research activity with unique industrial robotics equipment
- As well as other offers, according to business demand

AdditiveLab Advantages

- Faster lead times
- Reduced costs
- Improved design freedom
- Enhanced quality
- Increased efficiency



Lab's equipment can be used and operated with a variety of materials such as aluminium alloys, nickel-based alloys, construction steel, stainless steel, etc. In AdditiveLab we are also working on software development in order to control the robots, the process itself, and to predict and maintain various technological parameters and features.

*Mg.sc.ing. Arsenii Kisarev, Head of the TSI AdditiveLab,
10+ years of experience in the field of welding technology*

Unlocking the Potential of WAM

AdditiveLab is a leading research and innovation facility in the region dedicated to advancing Wire-Based Additive Manufacturing (WAM). WAM offers a unique & transformative approach to producing industry parts, tooling, and fixtures, delivering significant benefits for manufacturers.

Enhanced Efficiency and Speed

WAM enables the rapid production of complex parts directly from CAD designs, eliminating the need for most of the traditional methods and significantly reducing lead times.

Unmatched Design Freedom

WAM's ability to create intricate geometries and internal features opens up new design possibilities, leading to improved functionality and performance.

Superior Quality and Reduced Costs

WAM produces parts with exceptional strength and durability, ensuring consistent and reliable performance in demanding applications with a variety of materials available. By streamlining the manufacturing process and minimizing material waste, WAM offers significant cost savings compared to conventional methods.

AdditiveLab Case Studies

Blaník

Tooling for welding in an aviation factory in the Czech Republic.
3D printed with 316LSi stainless steel, printing time 1.5 hour,
printed mass 0.7 kg. Utilization coefficient 96%.



Partner with AdditiveLab: Apply for a free consultation and let our experts assess your requirements and provide tailored recommendations. Learn more about how WAM can transform your tooling and fixture production. Contact us at AdditiveLab@tsi.lv