

Service ID S00214



Location Austria, Poland

Functional safety testing of machines

Provider service

Łukasiewicz - Poznański Instytut Technologiczny

Link to content

<https://agrifoodtef.eu/services/functional-safety-testing-machines>

Type of Sector

Food processing, Greenhouse, Horticulture, Livestock farming, Tree Crops, Viticulture

Accepted type of products

Physical system

Type of service

Certification, Conformity assessment, ELSA assessment, LCA assessment, Performance evaluation, Test design, Test execu

Description

Within the framework of this service, we offer the possibility of carrying out functional safety tests of objects in the form of, for example, autonomous vehicles, robots, machines, agricultural equipment and components, etc. The service provides opportunities to test these devices with measurements of their mechanical, physical, acoustic, electrical parameters and electromagnetic compatibility to assess the overall safety of the user of the tested vehicles, machines, equipment and components for agriculture, horticulture, forestry and food. Verification of the tested parameters is based on the requirements of standards and directives declared by the manufacturer as compatible with its product and general normative safety regulations. Initial evaluation of an object is carried out based on its provided design documentation and/or measurements made on a prototype based on harmonized and non-harmonized standards with relevant EU and sector regulations. In the case of autonomous vehicles, we also offer tests of the correctness of response and operation of safety devices built into their structures in standardized cases of hazardous situations. The results obtained can be used in the further process of product

How can the service help you

Our testing service provides the opportunity to use a wide range of test and measurement equipment along with the participation of research staff specialized in its operation and interpretation of results. Within the proposed scope of the service, the client will have the opportunity to take advantage of a wide range of possibilities for testing their product. This is because the service provides opportunities to test these AI-equipped objects with measurements of their mechanical, physical, acoustic, electrical and electromagnetic compatibility parameters to assess the overall safety of the user of the tested vehicles, machinery, equipment and agricultural, horticultural, forestry and food components. Tests can be carried out on a prototype of a device, installation, system, as well as a finished device. Along with the object, its technical documentation

How the service will be delivered

Our service is based on a structured process of preparation for testing and the testing of the object itself for the purposes of assessing their impact on the environment, the safety environment of their operation and the operation of objects (equipment, machines or their prototypes) equipped with systems integrated with artificial intelligence:

You provide a functional prototype or test model of your solution, along with any previous analysis of its operation, the

Service customisation

Our service offers customised testing of electronic and mechanical equipment, robots and artificial intelligence-based systems. In addition to physical testing, we offer the possibility to analyse the technical documentation of an object to meet safety requirements. We offer tests focused on analysing changes in the state and behaviour of specific components, safety systems, with the possibility of extending measurement equipment and applying advanced data analysis techniques. For the service to be implemented properly, the customer must provide full access to the data in its possession, documentation and other research that has been carried out for the innovation (device, technology, system) that is the subject of the service. Data