Service ID S00334



Location At user's premises, Poland

Conformity assessment and compliance tests

Provider service

Lukasiewicz Poznanski Instytut Technologiczny (L-PIT)

Link to content

https://agrifoodtef.eu/catalogue-of-services/conformity-assessment-and-compliance-tests

Type of Sector

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

Accepted type of products

Design / Documentation, Physical system, Software or Al model, Other, Data

Type of service

Certification, Conformity assessment, Cybersecurity, Data analysis, ELSA assessment, LCA assessment, Performance evalue

Description

As part of this service, we test and measure, among other things, mechanical, physical, acoustic, radio, electromagnetic compatibility and electrical parameters for the purpose of assessing the overall user safety of agricultural, horticultural, forestry and food machinery, equipment and components. Verification is based on the requirements of standards and directives declared by the manufacturer. We carry out an initial assessment based on the design documentation provided or/and on measurements taken on a prototype based on harmonised and non-harmonised standards with relevant EU and sectoral legislation. This is to ensure that for instance essential requirements resulting from for instance New Legislative Framework directives and other EU law are fulfilled to better protect both users and agrifoodTEF professionals from unsafe prototypes of products being subjected to other afT services in the next stages. One of the aims is to help manufacturers is to verify the prototype before constructing final agrifood products to be placed on EU single market. The technical scope of test may result from requirements of EMC, LVD, RED, MD, MR on other NLF directives and regulations but is limited to prototypes.

How can the service help you

Our testing service provides the opportunity to use a wide range of test and measurement apparatus, together with research staff specialised in its operation and interpretation of results. A prototype of a device, installation or system can be tested, as well as a finished device. Along with the object, its technical documentation can also be subjected to verification in order to indicate the necessary changes and corrections for the improvement of safe work and operation of the device under test. This service provides the client with extensive information about the tested object in terms of its operational safety, susceptibility to external phenomena as well as its impact on the environment and surroundings. These tests are carried out according to methodologies that comply with relevant technical standards and other legal acts such as New Legislative Framework directives and regulations of EU. The result of the measurements and tests can also be a guideline for a prototype for further preparation of the compliant end product.

How the service will be delivered

Our service offers customised testing for electronic and mechanical devices, robots and AI-based systems. In addition to physical testing, we offer the possibility of analysing the technical documentation of the facility 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. Test reports are personalised and can be supplemented with workshops and training for your team.

We require a fully functional prototype and complete technical documentation. There are limitations regarding the dimensions and weight of the devices, and some tests may require prior resource reservations. All information is treated confidentially, with the option to sign a Non-Disclosure Agreement (NDA). Please be aware of the risk of prototype damage during endurance tests. If the tests need to comply with specific industry standards or regulations, kindly inform us in advance. The timeframe and costs are determined individually based on the scope and complexity of the tests.

We ensure flexibility and professional support at every stage of the testing process, including both physical and virtual analyses. Please feel free to contact us to discuss the details and tailor the service to your unique needs.

Service customisation

Our service is based on a structured process of preparation for research and the testing of the object itself, in order to assess their impact on the environment, the safety environment of their operation, reliability to external electromagnetic phenomena 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, together with any previous analyses of its operation, technical documentation in your possession to help identify the ranges and possibilities of its operation.

- If it is not possible to provide a test object, then the client provides documentation of the test object, identifies where the object is located and makes it available to the team for testing.

- A comprehensive system analysis is carried out, taking into account specific guidelines and expectations. It allows us to determine the necessary scope of preparation of the site and the range, scope of tests to be performed.

- We prepare materials, methods and scopes of testing, focusing on legal documents, standards and directives relating to the tested object and its anticipated scope of operation and impact on the environment.

- A detailed test plan is developed, defining the scope, methodology and schedule of activities. This plan is discussed with the client and approved before the tests start.

- Tests are carried out using professional measuring equipment under operational conditions, as stipulated in the relevant test methodologies. Measurements include both a check of the operation of systems, systems, and the object under test, as