Service ID S00173

Location At user's premises, Austria

Testing of autonomous carrier & implement integration

Provider service

Josephinium Research

Link to content

https://www.agrifoodtef.eu/services/testing-autonomous-carrier-implement-integration

Type of Sector

Arable farming, Horticulture, Tree Crops, Viticulture

Accepted type of products

Physical system

Type of service

Collection of test data, Data analysis, Performance evaluation, Test design, Test execution, Test setup

Description

Evaluating an agricultural implement on an autonomous carrier platform involves more than just numerical metrics; it includes a qualitative analysis of various aspects. We assess work quality by examining performance under different agricultural conditions, including, among others, different soil moisture levels, varying crop densities, and sloped terrain. Safety evaluations consider system robustness in various scenarios. Functionality assessments measure adaptability in dynamic environments, accounting for sudden weather changes and unexpected challenges.

How can the service help you

The service addresses the need for comprehensive testing and evaluation of agricultural implements on autonomous platforms. Before using the service, customers may have uncertainties about the performance, safety, and adaptability of their agricultural technology in diverse conditions. After the service, they will have detailed insights into how their equipment performs across various scenarios, helping them optimise design, ensure safety, and enhance adaptability for dynamic farming conditions.

How the service will be delivered

The service is customisable to meet specific customer needs, such as testing under particular environmental conditions or focusing on unique performance metrics. Limitations include compatibility with the autonomous carrier platform and specific testing requirements that may depend on the equipment’s design or operational parameters. Most installation compatibility issues can be addressed with our 3D printing equipment. The software must be adapted to the customer's needs.

Service customisation

The service uses real and controlled environments to test procedures for multiple replicates and variables. The process is seasonal and typically lasts from days to weeks. Testing is done at Josephinum Research's Austrian or user-provided facilities. Clients receive a comprehensive report on performance, security and adaptability as well as recommendations on how to improve the implementation. Customers must provide the device or system to be tested and operational data or instructions.