Test and validation

2024WP3_VDLETG_001
Status: Complete

Technical functionality
TF-2 Testing interoperability, standardization, and compatibility

Problem owner:
VDL ETG Projects

Involved:
Tomatoworld

Autonomous track switching

Validation of autonomous track switching for an after-harvest logistics platform in the tomato greenhouse.

Broad knowledge question

How can an Autonomous Mobile Platform (AMP) with camera sensors and an AI model detect and compensate for variations in concrete smoothness and pipe rail variation to navigate accurately on a pipe rail?

Approach

According to the test plan, the AMP will undergo the following tests at Tomatoworld:

1. Track switching
2. "On" rail detection
3. "End of" rail behavior
4. Obstacle detection

Objective

The goal of this validation test is to demonstrate that the AMP can navigate from one pipe system to another without human intervention.

Results and reflection

The intended result of the test is to determine whether the variation at Tomatoworld falls within the working range of the system.

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