Test and Validation

2025WP3_Sieplo_001
Status: Completed

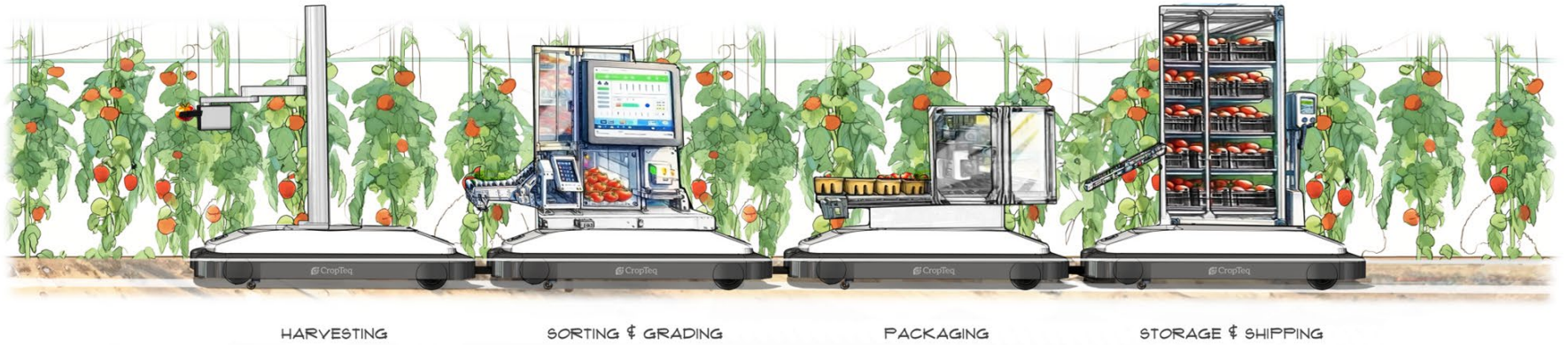
Technical Functionality
TF-2 Testing interoperability, standardisation and compatibility

Problem Owner:
VDL ETG Projects

Involved:
Tomatoworld

Autonomous Path Switching

Validation of Line Vision Software



Broad knowledge question
How can an autonomous mobile platform (AMP) use camera sensors and an AI model to detect and compensate for variations in concrete surface smoothness and pipe rail dimensions, ensuring accurate and safe navigation along the pipe rails?

Approach
In accordance with the test plan, the AMP underwent the following tests at Tomatoworld:

1. Path switching times
2. Emergency stopping distance
3. Safe speed
4. IMU testing

Goal
To test a platform for autonomous systems designed to transport, sort, package and store harvested produce.

Results and reflection
The tests achieved their intended objectives, with no unexpected issues identified.The newly tested IMU has since been adopted as the new standard.