Triplefin Vision

Cost-effective surface inspection for reflective components based on AI

The Project

Quality control of reflective surfaces is challenging due to their optical properties. Existing metrology systems for reflective surfaces are complex in design and expensive to purchase. Therefore, many companies still use manual visual inspection. However, this is prone to errors and can lead to high reclamation costs.
This problem occurs in many different industries in production, from the manufacture of car bodies to household appliances and medical products. Our innovative metrology system is capable of detection damages on reflective surfaces. As we already have an early adopter from the automotive industry, this is our first targeted market.
The underlying technology is based on commercially available hardware and our special software core that combines real-time capable methods from classical image processing with artificial intelligence.

The Team

Location: IAIS (Sankt Augustin) + IPT (Aachen), prospectively located in Münsterland region

Members: Theresa Bick (algorithms, software development, customer relationship management), Hendrik Mende (hardware design + construction, finance, project management)

AHEAD Infos

Batch: 2/2023   **Phase:** 1   **Track:** Spin-off

The Business Model

Unique Selling Proposition: Unique offering of cost-effective hardware and detailed damage detection with reliable results. Retrofittable into existing production lines without modifications of the production process; applicable from diffusely to highly reflective surfaces

Unfair Advantage: Ability to detect small surface anomalies with our exisiting software core

Revenue Model: **One-time fee:** Installation/adaption
Recurring fee(s): SW licence, maintenance/service

Venture Readiness Level

VRL	Ideation	Incubation	Traction	Growth

Technology Readiness Level

TRL	1	2	3	4	5	6	7	8	9

The Side Facts

Customer Focus: B2B

Searching For: (Pilot) customers, team member or co-founder (software development)

Industry Tags: automobiles & parts, construction & materials, industrial goods & services, personal & household goods, software & services, technology hardware & equipment

Technology Tags: artificial intelligence, deep learning, image recognition, machine learning, smart factory, industry 4.0