

DeepHawk

Next Generation AI
Visual Quality Control
For Manufacturers

Pitch Deck

April 2024



Defects: **Major cost** & Major Focus for Manufacturers

5 to 10%
of REVENUE

according to AFNOR and ScienceDirect



Existing AIs **Falling Short**

- Learning **Takes Weeks**
 - 1000s of images / faulty products
- **50+ Parameters** to configure
- Requiring **AI skills**
- **Not** Adaptable
- **Cloud** dependant

Deep Learning

Pre-learning All **Defects**

Hardware + Software Bundles

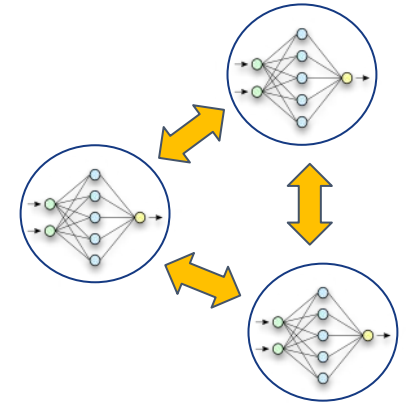
DeepHawk's **Unique Technology**

Frugal AI: Small Dataset

Learns from **OK-Products**


Unique, Proprietary
Patent-Pending

Specific arrangement
of **small neural networks**
working in **synergy**

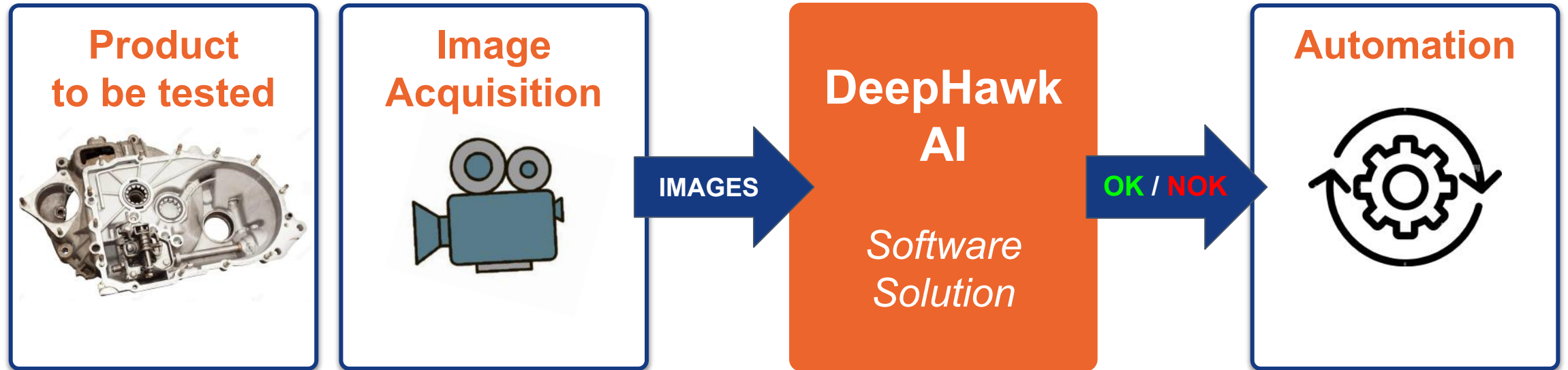


375x Reduction
in **Carbon Footprint**

Outperforming & Replacing Other AIs

Manufacturers Expectations	Other AIs	DeepHawk	Improvements brought by DeepHawk
			
Small dataset	up to 3000 images of defective products	30 to 50 images of good products	60x
Fast learning phase	1 week to 2 months	5 to 30 minutes	300x
Fast Inference	> 500 milliseconds	15 milliseconds	30x
Low False Positives	20% to 53%	0.5% to <2%	10x

DeepHawk's **Visual Quality Control**



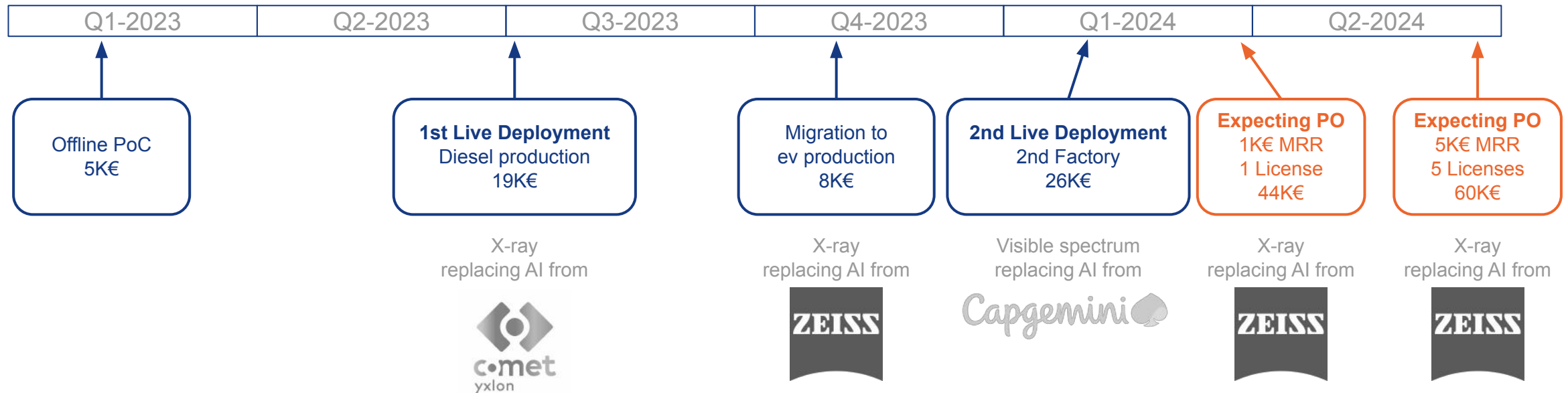
- Mechanical parts
- Electronic boards

- Visible
- X-Ray
- Infrared
- Microscopic
- Still
- Video
- Multi-View

- On-premise
- Standard PC
- Nvidia GPU

- MES
- Profibus
- ProfitNet
- Rest-API

Case Study STELLANTIS



"Stellantis has consulted 12 solution vendors ...

*Among all the participants, **DeepHawk** demonstrated the best performances, achieving a 100% detection rate with zero false positives ..."*

ERIC NOUGAREDE, MFG/UPE/UAPE/UAAE/AEE/AEWE, Assembly Engineering West Europe - December 6, 2023

Business Model & Markets



Focusing on
3 markets

France 
Domestic Market
260,000
manufacturers

Germany 
2x the size of
France
45,000
manufacturers

USA 
4x the size of Germany
638,000 manufacturers

Our **Very Complementary** Team



Gilles Allain, MBA

CEO & Cofounder

30 years in **B2B Software Sales**

New markets, Hypergrowth, \$60M quota

Serial entrepreneur, US startups



Tomas Crivelli, Ph.D.

CTO & Cofounder

20 years in **Computer Vision AI**

40+ International peer-reviewed publications and patents

AI Innovator and second-time deeptech entrepreneur



Thibaut Pillon

5 years in Full-stack Dev.

Joined Dec. 2022



Cyrine Nabli

5 years in AI computer vision

Joined Nov. 2023



Funding **Ask**

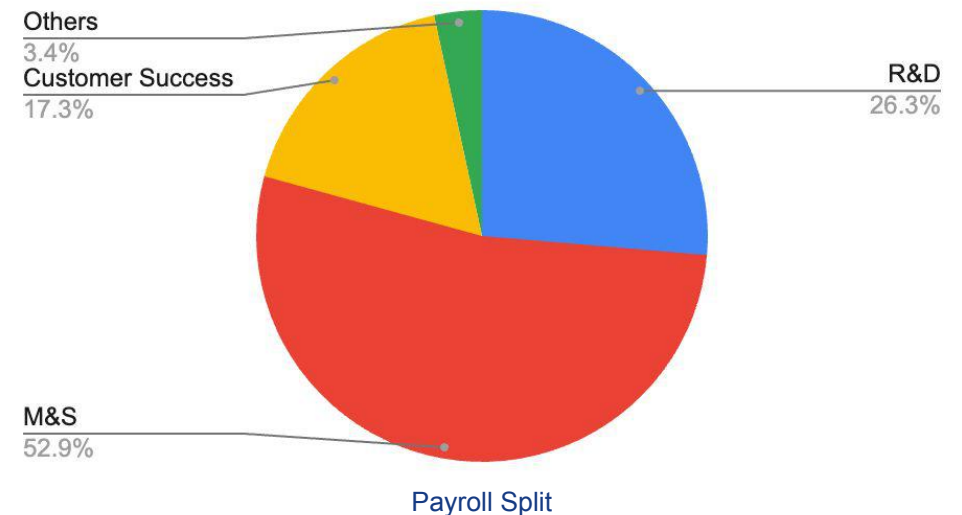
- **Equity:** 1M€
- Non-dilutive: 500K€
- Closing: Q3-2024

Seed Goals by eoy 2025:

- **1M€ ARR**
- **30 clients** in EU + US 
- **2 OEM deals**
- Focus: Automotive and Mechanical parts
- ready for **series A** in early 2026

Use of Proceeds

- Headcount increased from 4 to 26
 - to **win new clients**
 - to deliver **customer projects**
 - Locations: FR + DE + US
- **Lead generation** (events + inbound)
- R&D to add **new features**



Why **Now** ?

130+

Manufacturers Meetings



BORGWARNER

Valeo

STELLANTIS

SCHAEFFLER



BOSCH HITACHI



HONDA



MAGNA

COGNEX

All Manufacturers...

- are **actively looking for** a solution
- have **already tested** 4 or 5 solutions

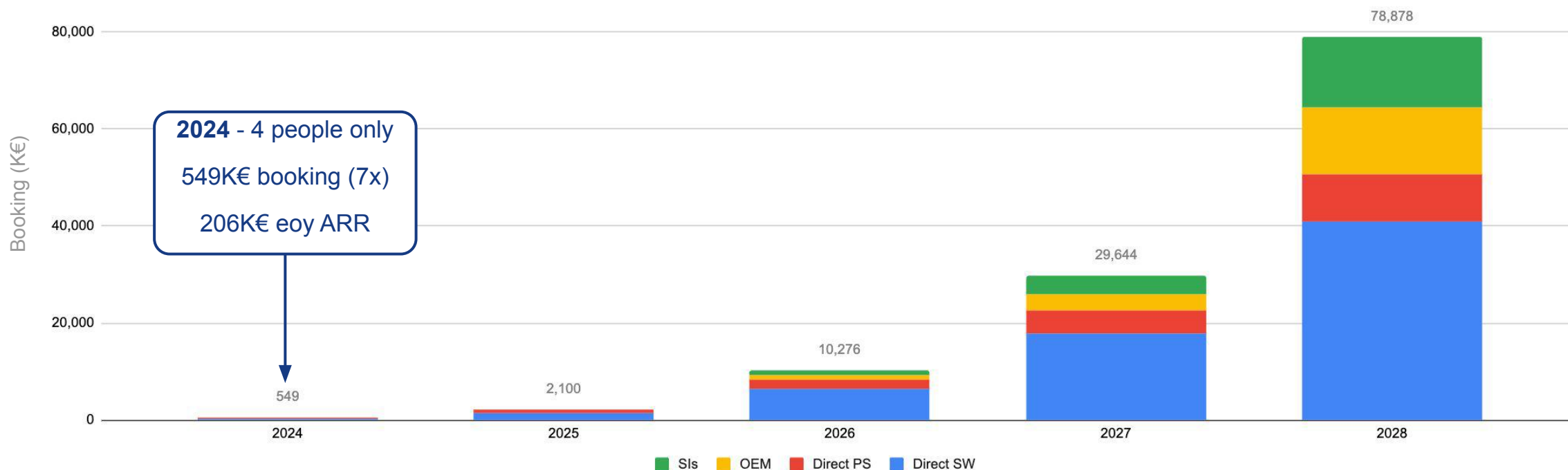
Right **Technology** - Right **Place** - Right **Time**

Not a Good-to-have, this is a **Must-Have**

Becoming **Segment Leader** in Visual Quality Control

- **Strategy**

- Expanding **direct sales**
- Leveraging/Introducing **system integrators**
- Securing **OEM** deals
- Automotive/Mechanical
- France, Germany, US





Becoming the Leading AI For Visual Quality Control

Contacts:

Gilles Allain, Cofounder & CEO

+33 6 7017 1509

+1 (617) 651-7423

gilles@deephawk.ai

Tomas Crivelli, Cofounder & CTO

+33 6 4329 2259

tomas@deephawk.ai

DeepHawk SAS

2B Rue de la Châtaigneraie, 35510 Cesson-Sévigné, France

DeepHawk Inc

1484 Pollard Rd #3076, CA 95032 Los Gatos, USA

www.DeepHawk.ai



ANNEXES

About DeepHawk

FY2023 Financials

- 20 months
- Revenue: 64K€
- Booking: 74K€
- Headcount: 2.75

Corporate

- Incorporated in May 2022
- Cap Table: 100% cofounders
- HQ in France, Subsidiary in USA

Technology

- INRIA Startup Studio in 2021
- TRL-8 since April 2023
- In Production
- 1 pending patent

Supporting Organizations



DeepTech Awards



Video demo of our User Interface

<https://www.youtube.com/watch?v=jrcxibOtX4U>

Customer **Testimonial**



*"Stellantis has consulted **12 solution vendors** for anomaly detection on automotive mechanical parts.*

Seven of those vendors, including DeepHawk, were selected to showcase their solutions at our annual event, the Factory Booster Day, held in Brazil in November 2023.

*Among all the participants, **DeepHawk demonstrated the best performances**, achieving a 100% detection rate with zero false positives, using a training set of only 50 images of defectless parts."*

ERIC NOUGAREDE

MFG/UPE/UAPE/UAEE/AEE/AEWE

Assembly Engineering West Europe

Assembly Innovation Technical Pilot

December 6, 2023

Customer **Testimonial** SCHIEDERWERK



*""At Schiederwerk, a German manufacturing facility of Groupe Legris Industries, we conducted a **thorough evaluation of DeepHawk** to enhance our quality control processes for electronic boards. We started with a POC (Proof Of Concept) and finalised a Prototype in October 2023. **We are currently in the industrialisation phase**, having previously explored alternative solutions, none of which provided the desired outcomes in a fast and simple manner.*

*The DeepHawk prototype is promising with, on one hand, **exceptional results** as a remarkably low false positive rate ranging from 0.17% to 0.40% and an unwavering 100% detection rate, on the other hand a "learning process" which is fast and simple.*

*In light of these **remarkable accomplishments**, we assert that DeepHawk is on the way to solve an issue for which we have not found another solution on the market landscape."*

NICOLAS JOFFRION

Industrial Operations Director

Groupe Legris Industries

January 19, 2024

Accolades !



Prix Innovation Bercy – IMT
Palmarès 2023

Grand Prix : DeepHawk



<https://www.startus-insights.com/innovators-guide/manufacturing-startups/>

20 top Industry 4.0 companies and startups
in France in 2024



<https://www.f6s.com/companies/industry-4-0/france/co>



<https://www.cbtnews.com/rising-labor-costs-propel-automakers-toward-robotics-and-automation/?AutomotiveVentures>

*"Stellantis has consulted
12 solution vendors ...
DeepHawk demonstrated
the best performances."*

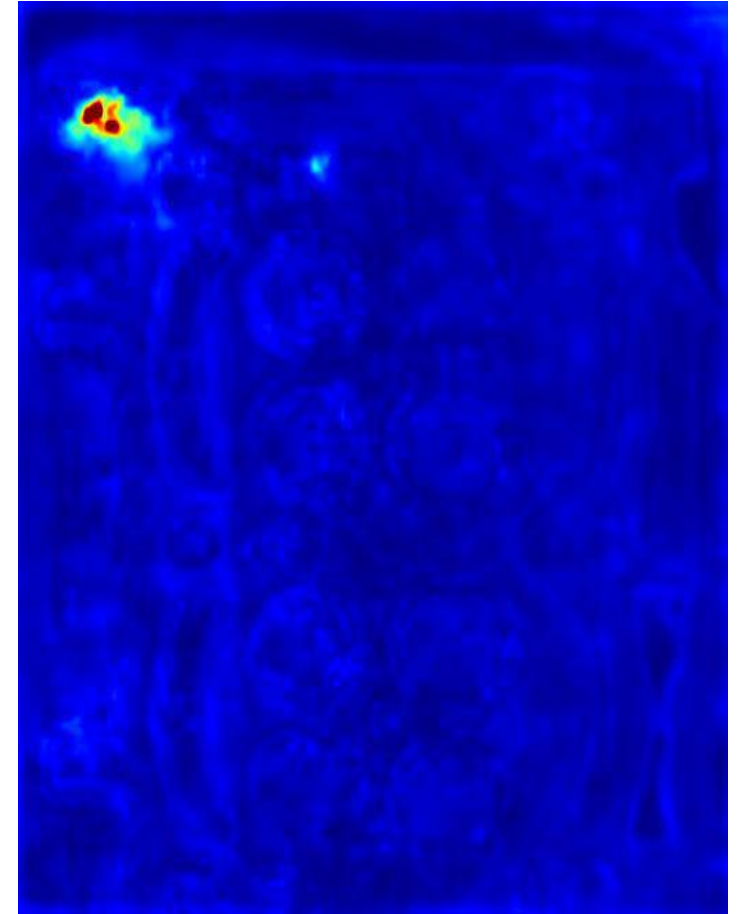
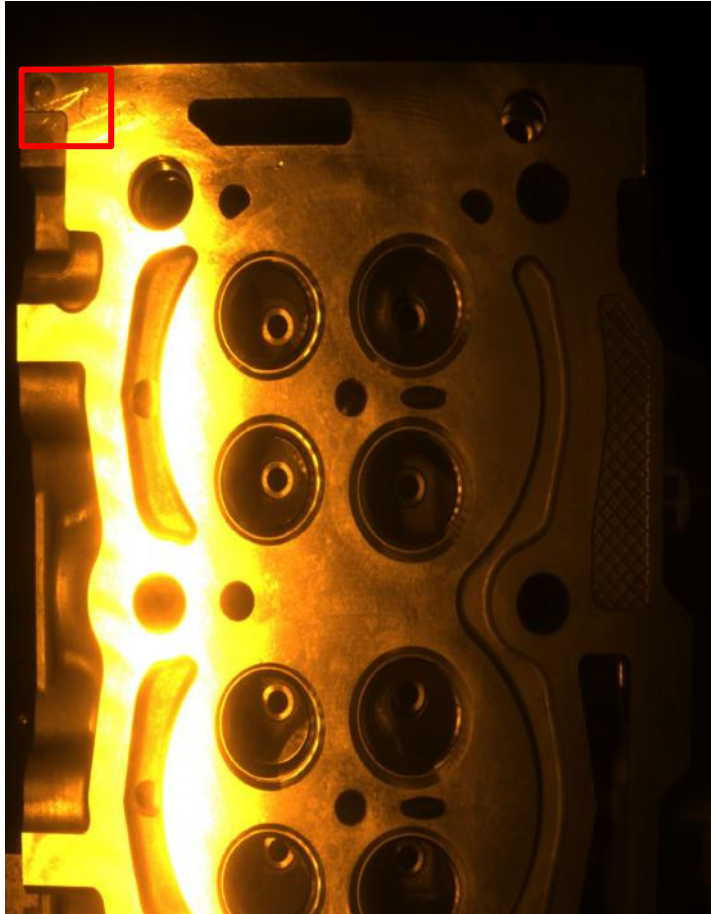


*"thorough evaluation ...
exceptional results...
.. we have not found another
solution on the market."*

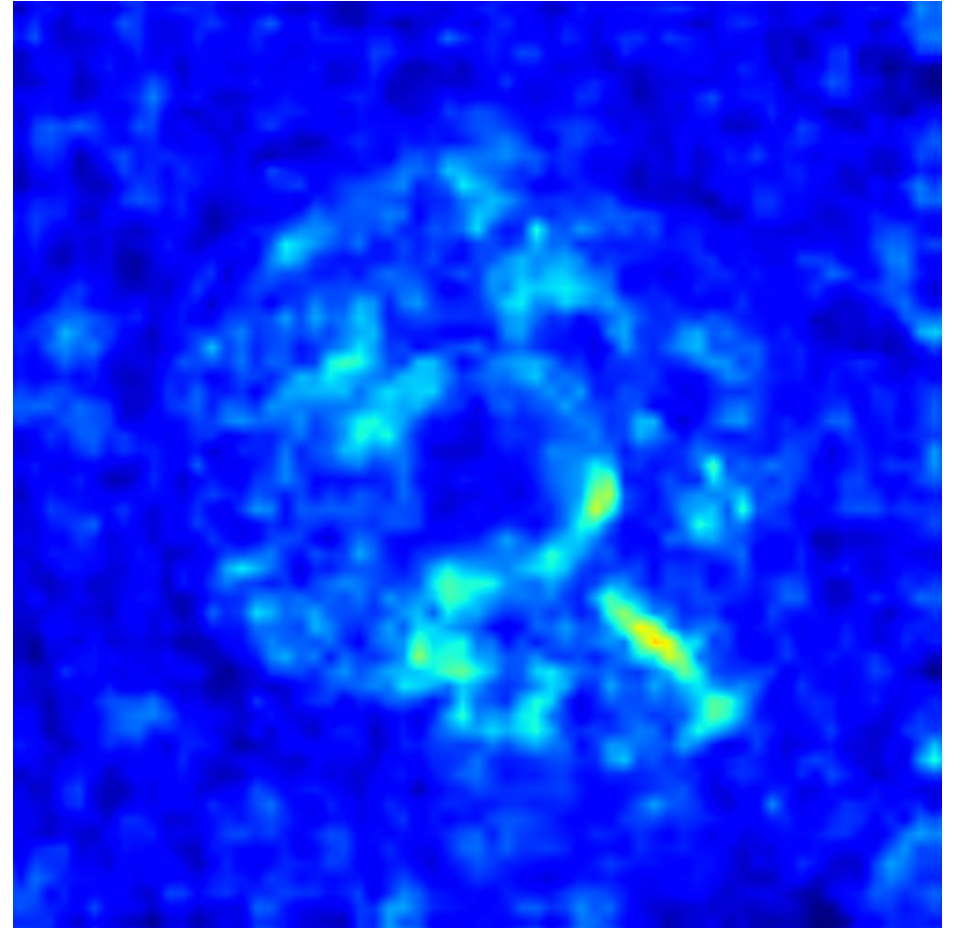
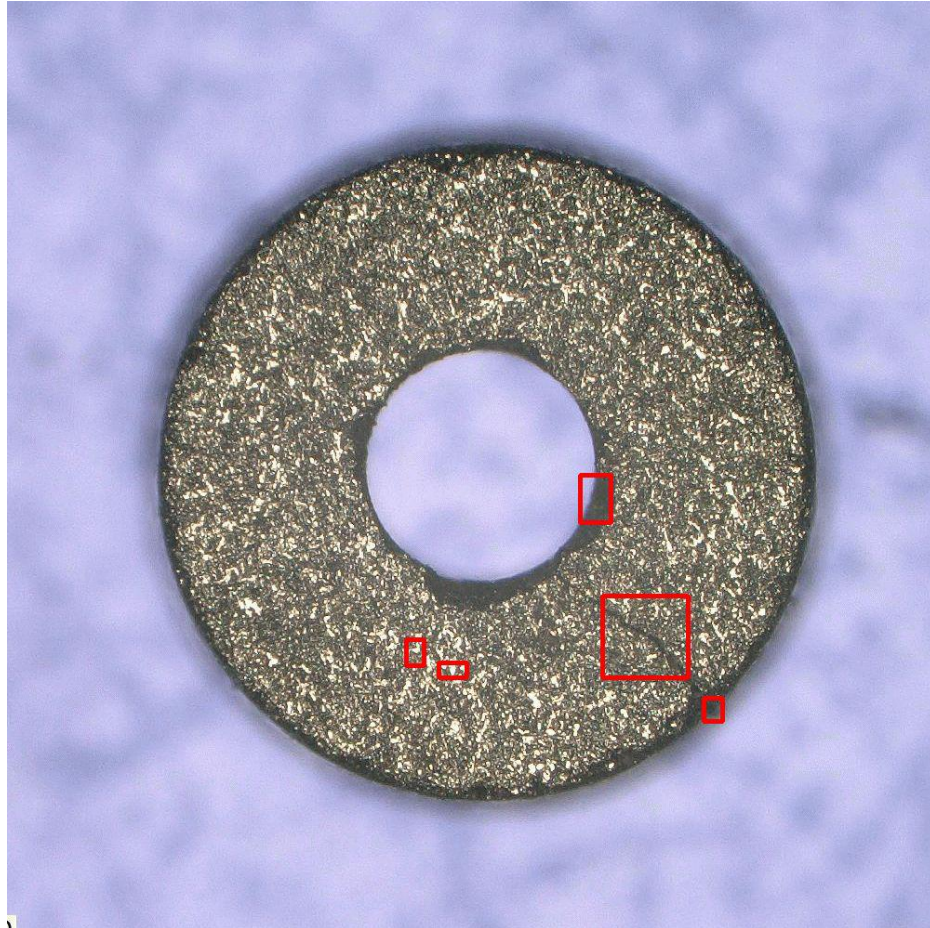
SCHIEDERWERK

GRUPE LEGRIS INDUSTRIES

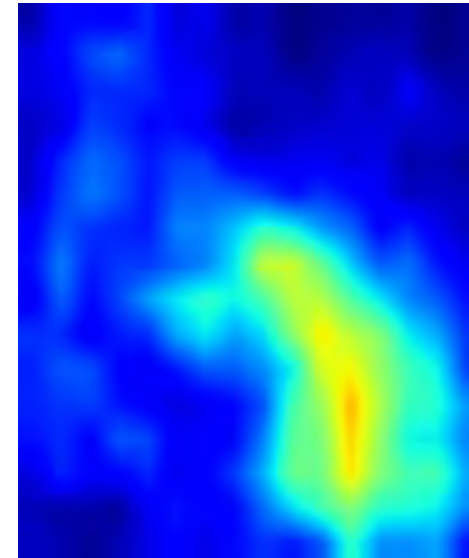
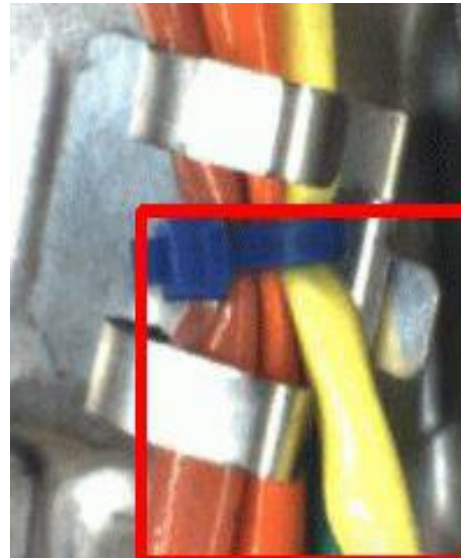
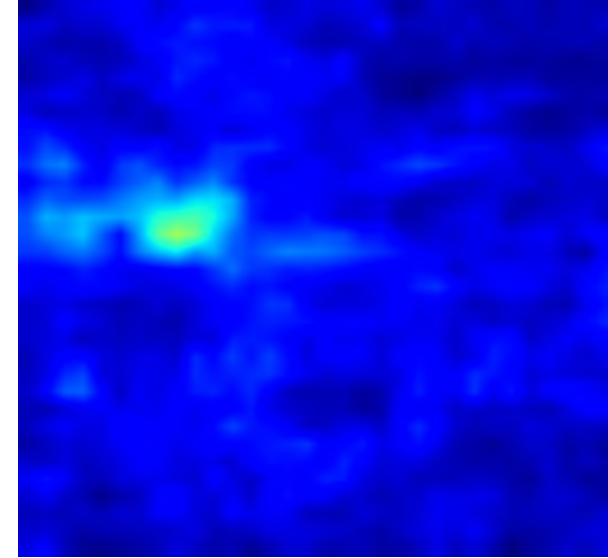
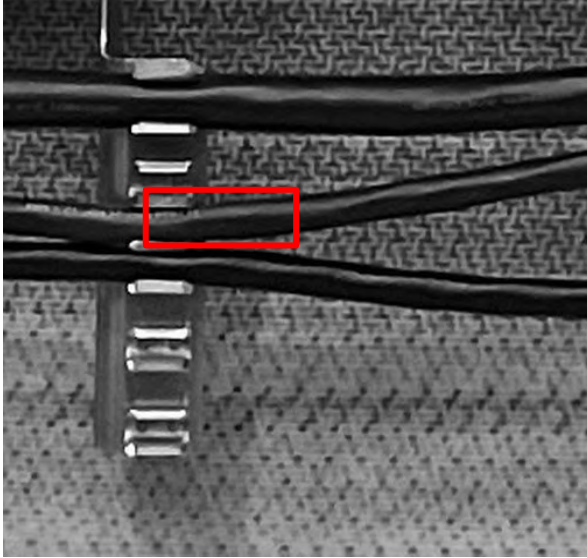
Powerful Detection- Variation of Light



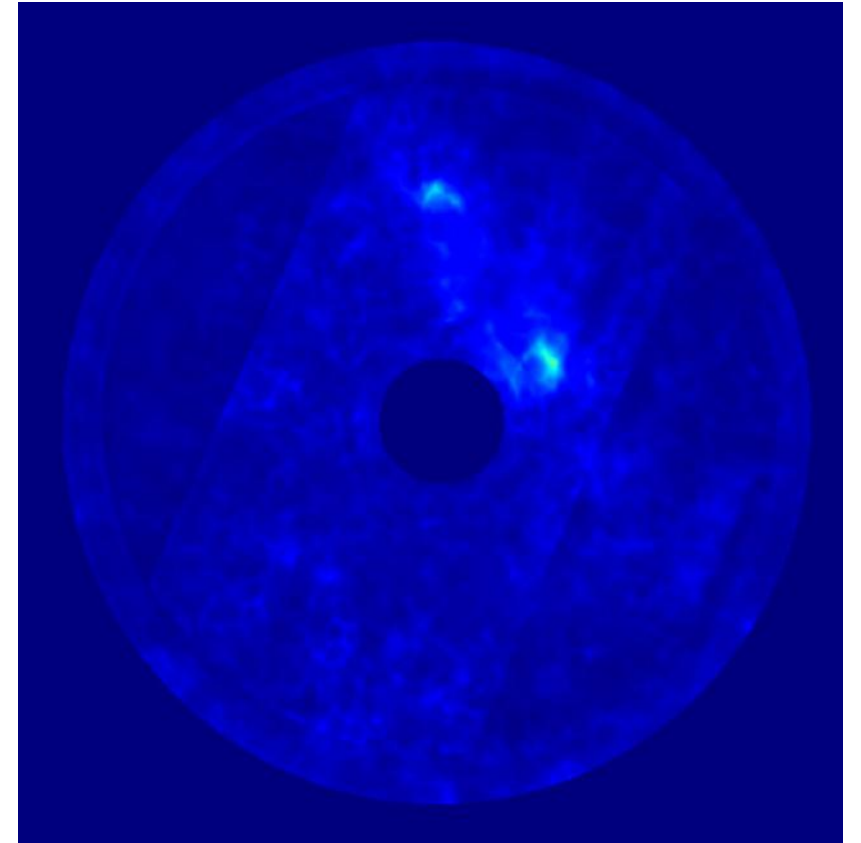
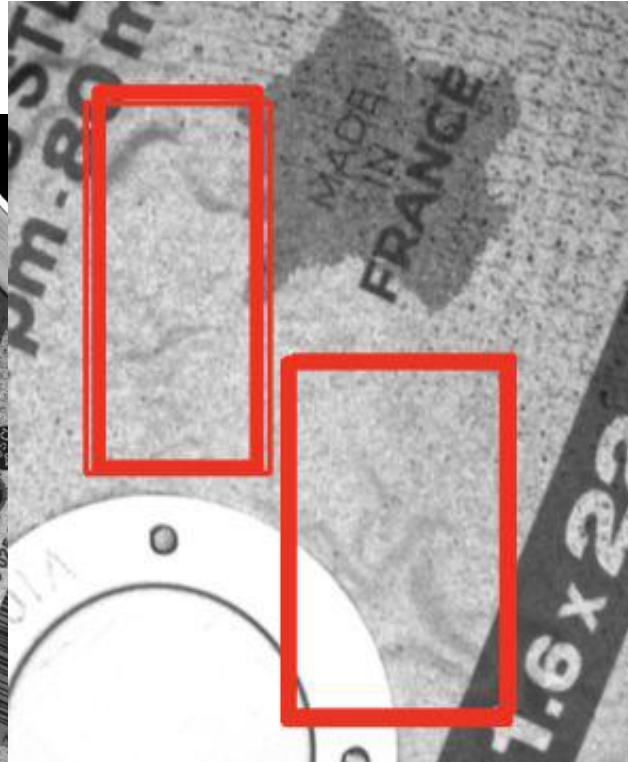
Powerful Detection- Microscopic Parts



Powerful Detection- Large Complex Parts



Powerful Detection- Subtle Details



Powerful Detection- Dead Pixel

