

# Cretec Cybernetics

**Cretec Cybernetics** develops and builds cybernetic systems. Our focus is on powerfull turn-key solutions for automation with **machine vision** and **robotcis**.

## What do we do?

- Industrial Machine Vision
- Part Separation and Handling Systems
- Specific LED-Lighting Systems
- Collaborative Robotics - Cobots
- “Small” Industrial Robots
- Artificial Intelligence – Deep Learning Inspection Systems
- Code-Reading and Verification-Systems
- Unit Level Traceability

We use the latest and most innovative technologies to implement solutions that elevate your productivity, efficiency and quality to new levels.

**Plug & Work!**



# Where we are?



Office | Erlangen

Germany

Headquarters | Büdingen

Germany

Headquarters | Istanbul

Türkiye

Office | Barcelona

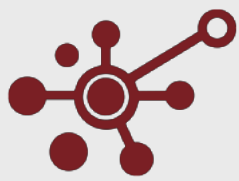
España

Office | Sant Luís Potosí

México

Office | Medellín

Colombia



# Cretec Cybernetics

## CODE READER

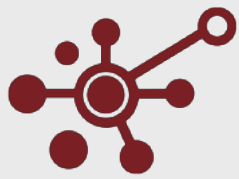
DPM Code Reading

Code Verification

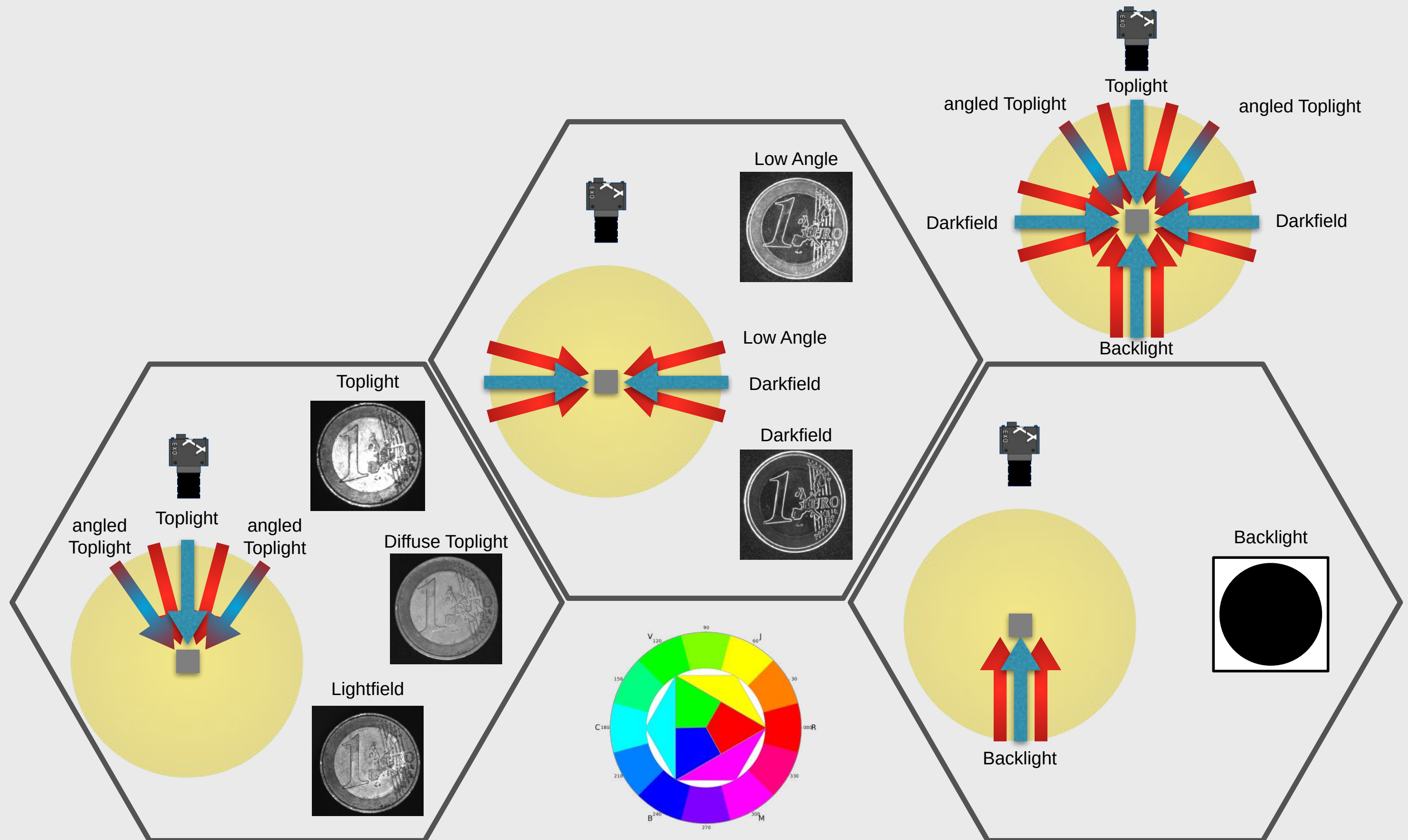
Fast OCR Reading

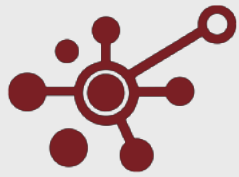
PC based Code Reading





# Everything begins with the Light!





# CODE Reader

1D Codes on Labels

2D Codes on Labels

1D & 2D Codes Direct part Marked (DPM)

Marked via Laser

Marked via Needler

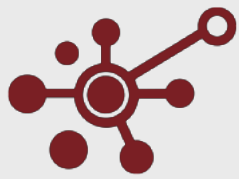
Marked via scratching

OCR (Optical Charakter Recognition) Reading  
AI!

Code Verification

ISO 15415 / ISO 15416 / ISO 29158 / AIM/DPM

OCV (Optical Charakter Verification)



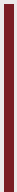
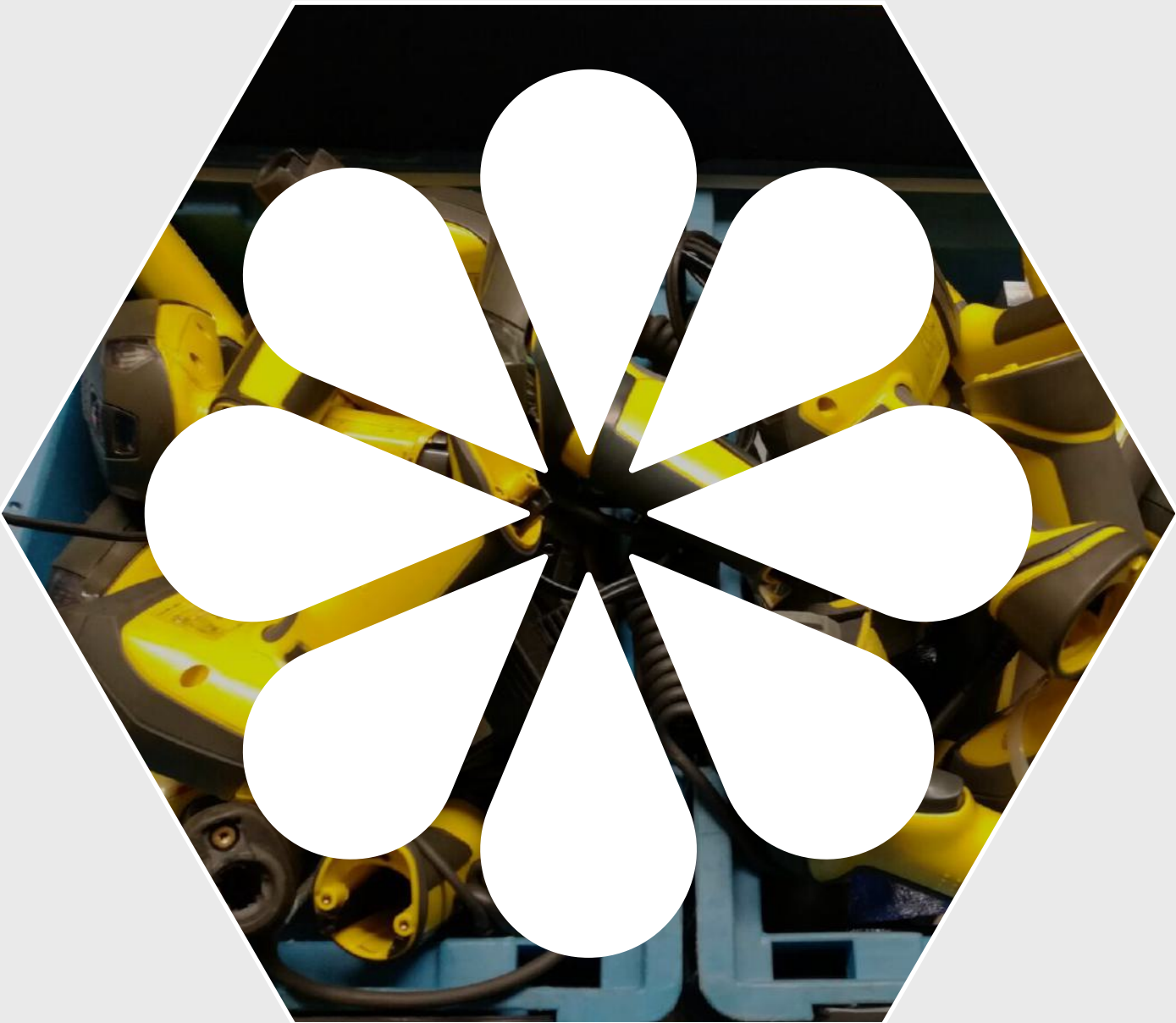
# Handheld Reader

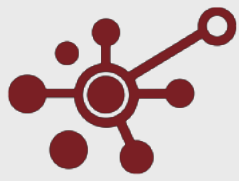
Reading Performance

Ergonomics

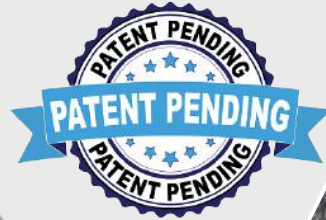
Durability

Weight



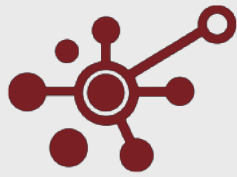


# ID Phaser - Handheld Reader



## Code Reading next Level

- Highest End DPM Reading Performance
- Solid and light
- Communication to all fieldbuses
- Ergonomic design
- Defies the harshest environmental conditions



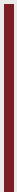
# Verification Systems

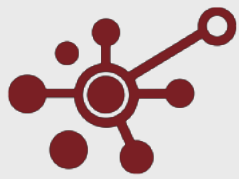
According to ISO

Calibrating

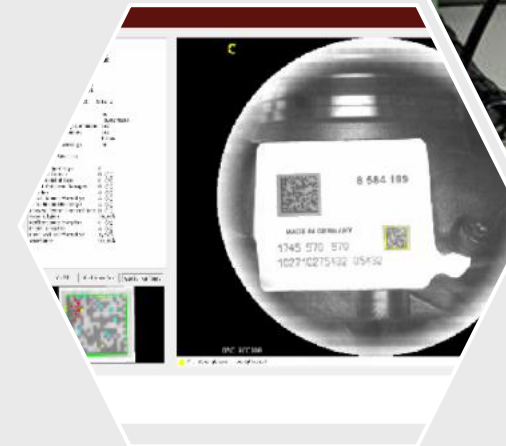
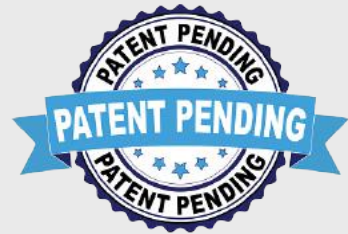
Usability

On-Line / Offline Verification





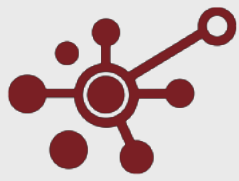
# Vision Tube - Code Verification System



## Code verification with autofocus

- Closed verification system - Ready to use
- 10 megapixel resolution
- World's only verification system with autofocus
- Verification according to ISO 15415, 15416, 29158 resp. AIM/DPM
- 100% integrable into the production line





# Fast Reader

OCR Reading

Best before date (German MHD) Reading

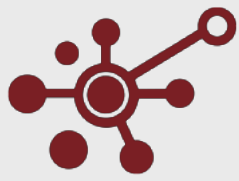
Not only comparing

- Real reading of every Character

20 Cans per Second

- 1.200 Cans per Minute

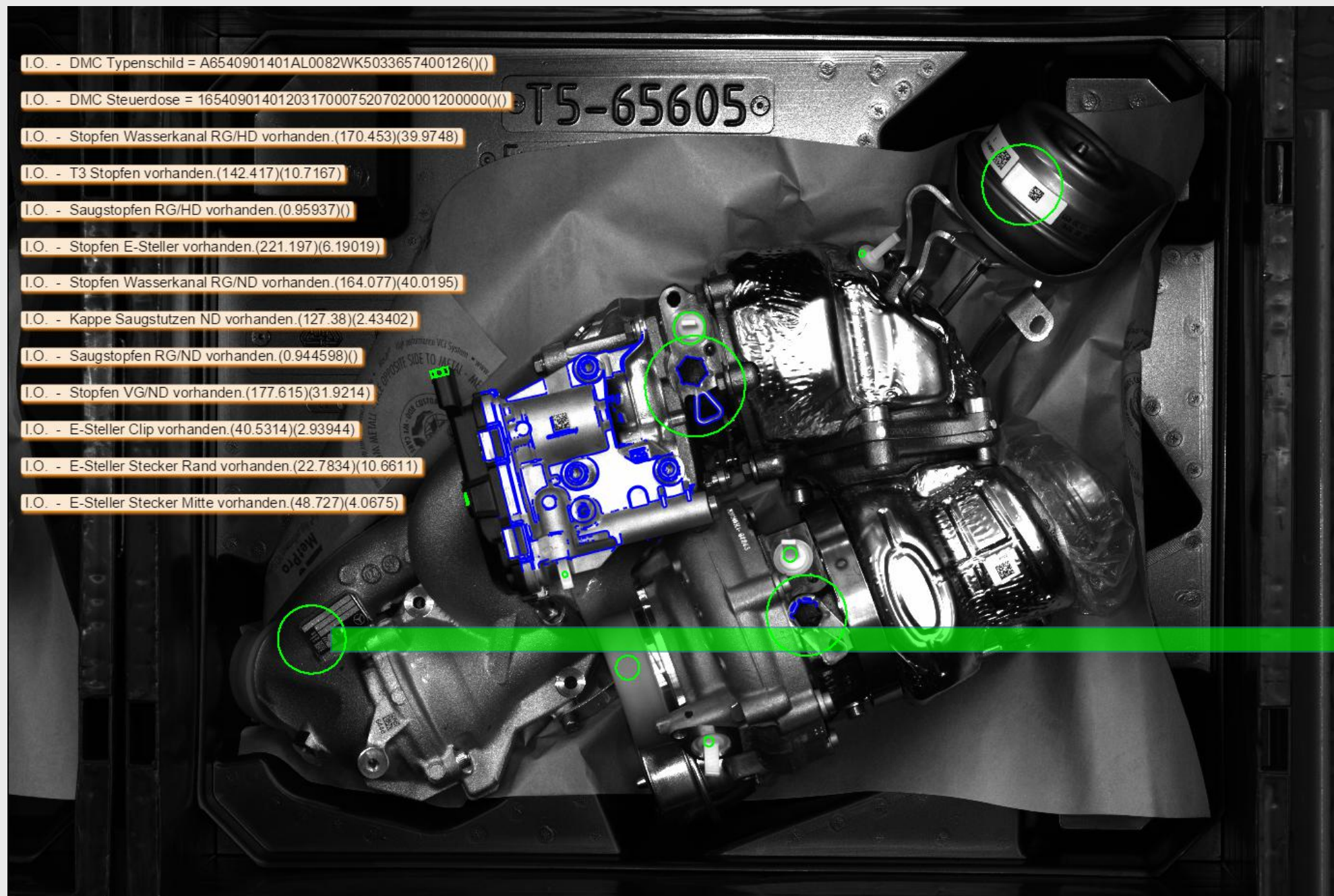


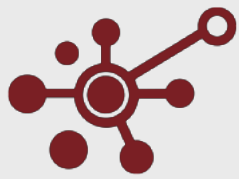


# Turbocharger Control - related to Serial No.

Size Field of View (FOV): 600 mm x 500 mm

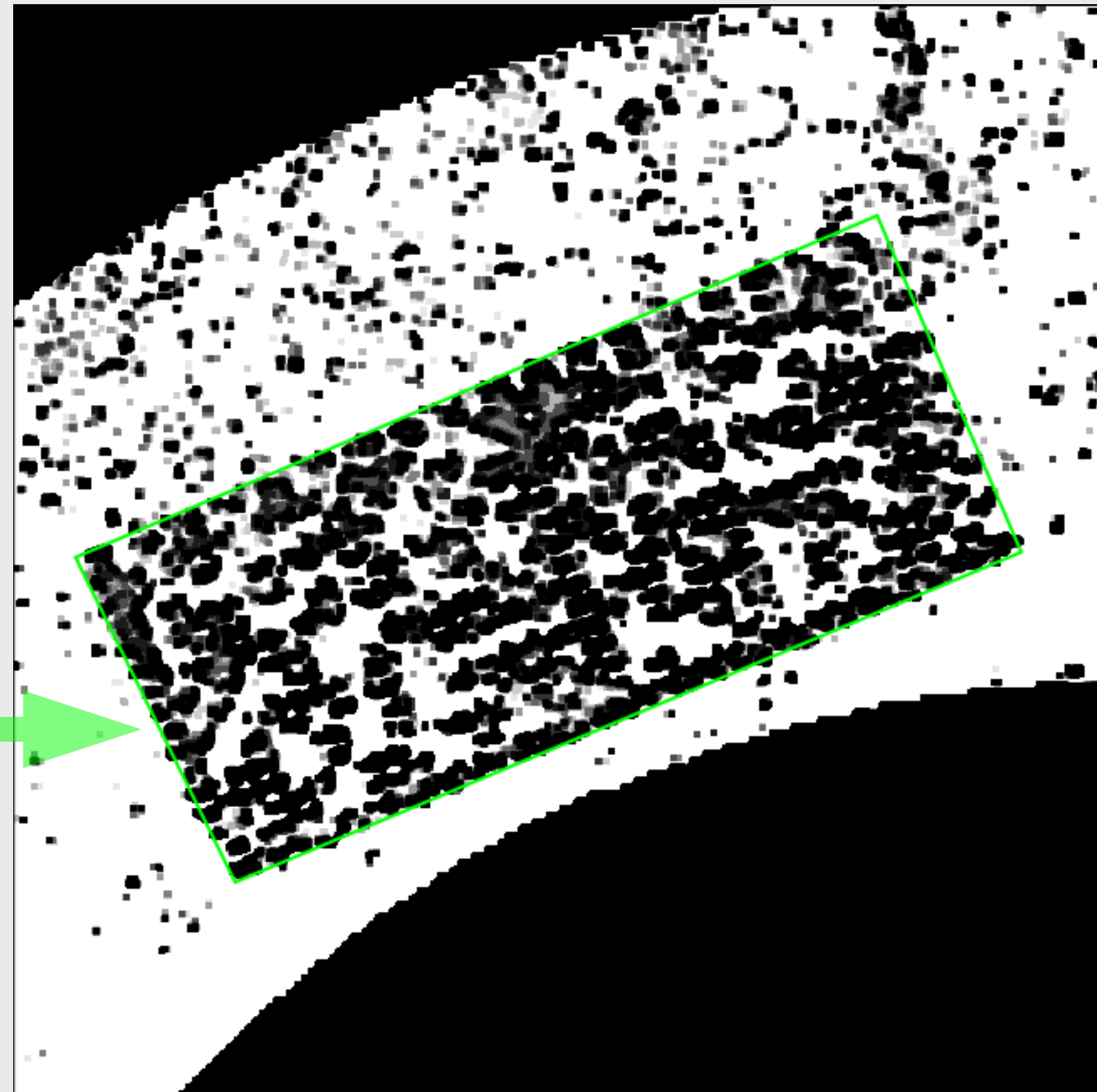
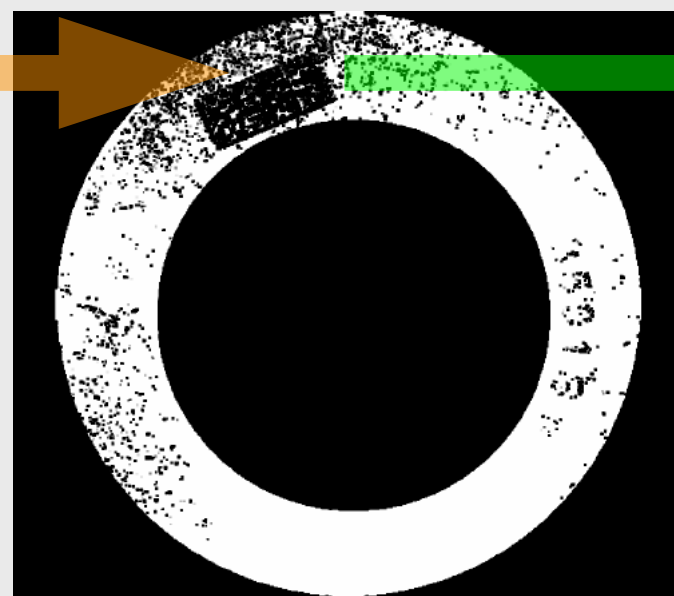
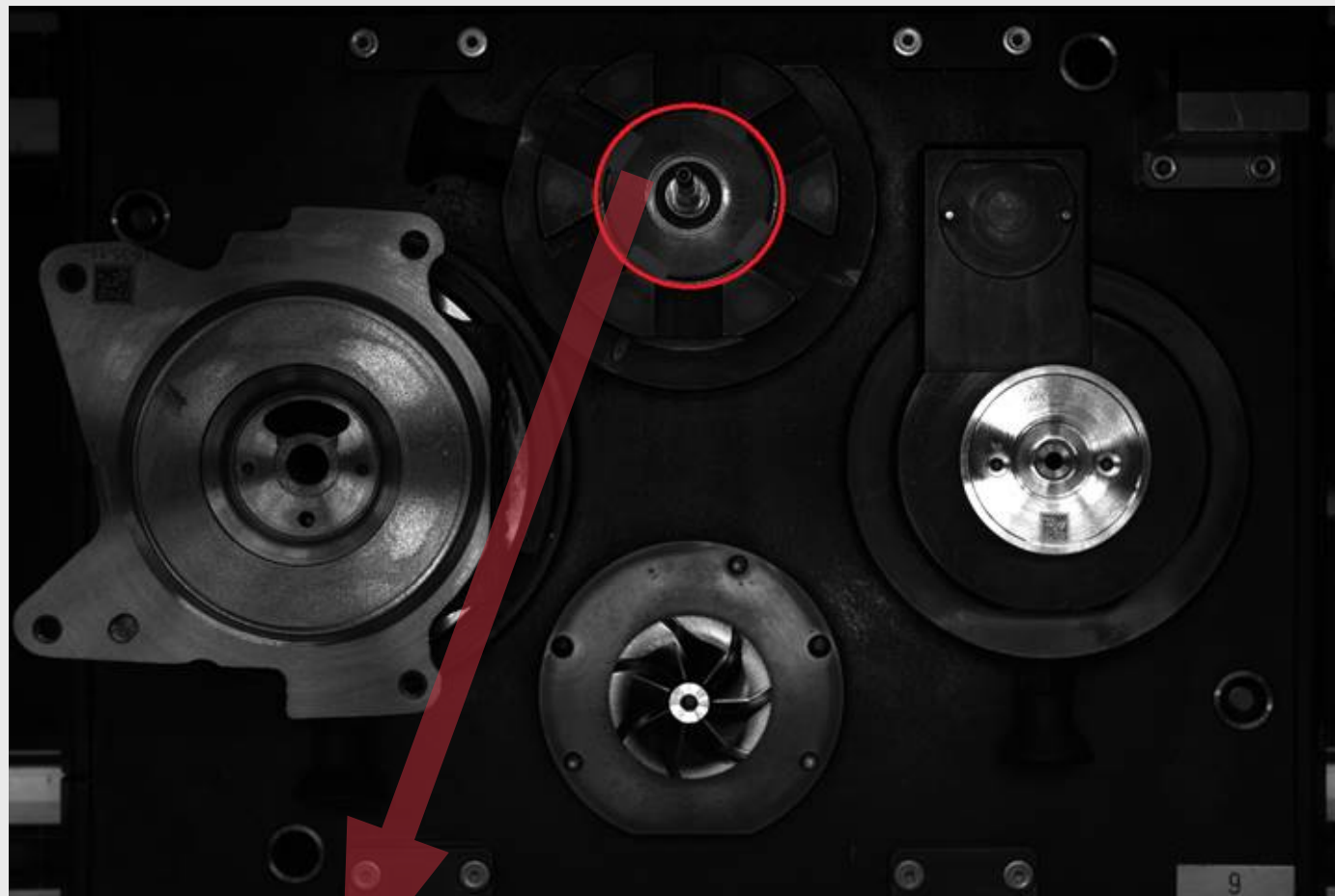
Size Datamatrix Code (DMC): 5 mm x 5 mm

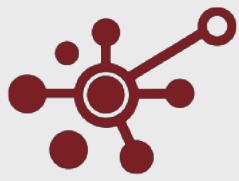




# Direct Part Mark (DPM) Code Reading

Low Contrast, Low Quality, Low Module Size





# Publications in the specialized press

Only in 2019 Cretec Cybernetics products and solutions were published in over 40 editorial pieces, by 2021 we have over 200 Pages specialized publications.





THANKS!