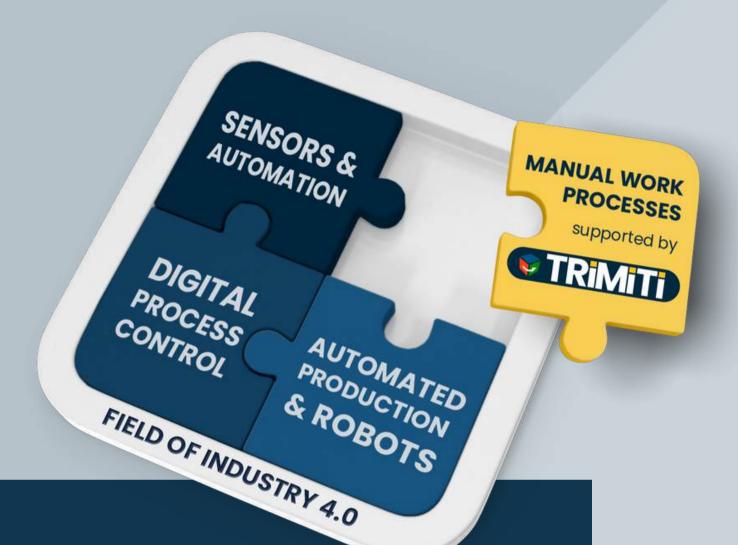




CAMERA- & AI-SOFTWARE SOLUTION for ZERO DEFECTS in MANUFACTURING



# **OUR UNIQUENESS AND SERVICES**

- ZERO DEFECTS in MANUAL & AUTOMATED MANUFACTURING
- SAFEGUARD against SHORTAGE of SKILLED WORKERS
- SME DIGITIZATION & ADVANCED PROCESS CONTROL
- OUTSTANDING OBJECT DETECTION by SELF-DEVELOPED SOFTWARE





# Nominations for Awards 2024

Largest summit of Automotive and IT industry in Germany



Award for outstanding innovations proclaimed by State of Bavaria

innovationspreis Bayern 2024

Wir sind nomi-niert!







# GET AHEAD WITH WIRMIT



# SAVING MONEY AND FURTHER BENEFITS



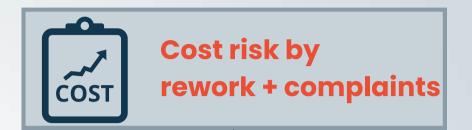
FOR YOUR PRODUCTION



# PAIN TOPICS IN MANUFACTURING AND INDUSTRY 4.0 / IIOT

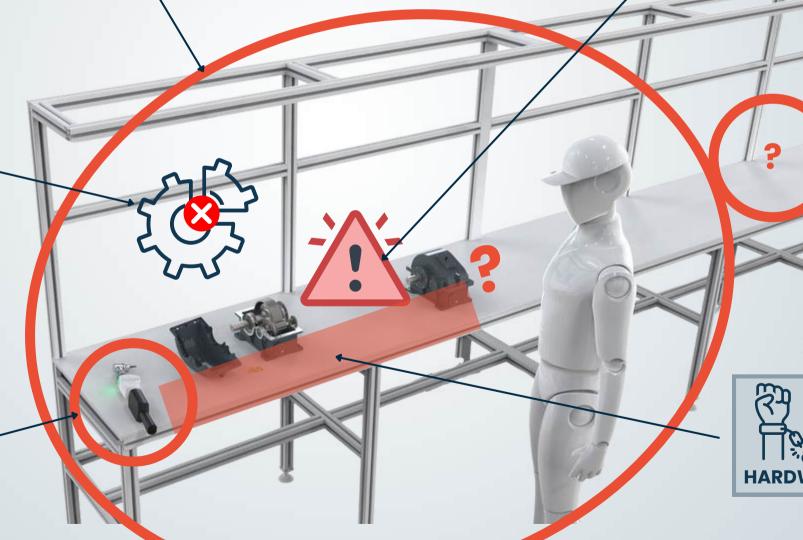








Most software are island solutions



Often only limited **EOL-control** 

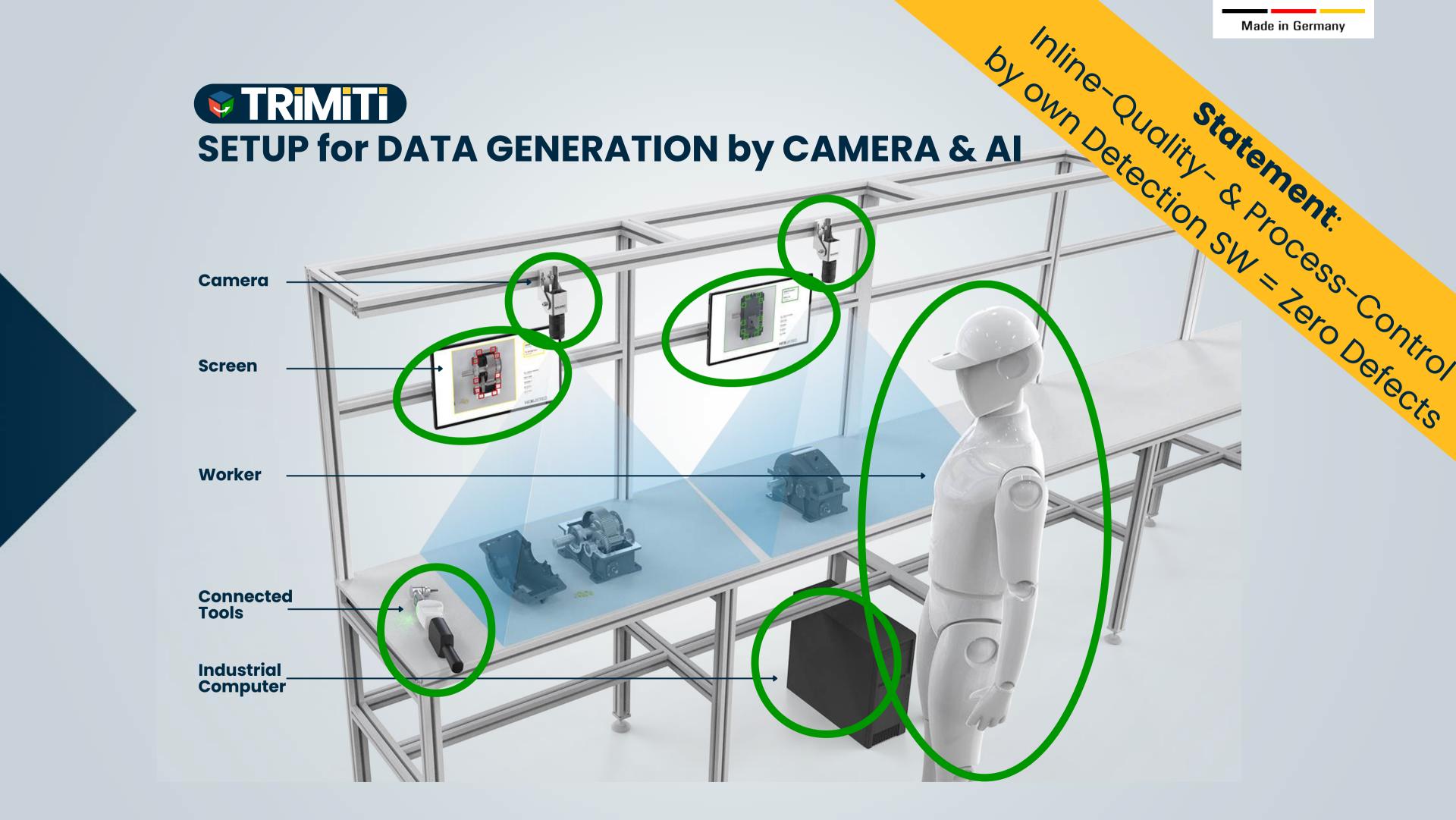


**High investment for** Industry4.0-devices



**Expensive hardware** + overhaul services

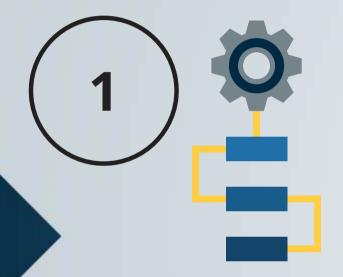




# **TRIMITI**

# PROCESS CONTROL in YOUR PRODUCTION

QUOIITY OFF FRACOBILITY NO TENOTH



**Detection** of correct assembly work flow







• Check of manual work





 Guided training on the product

**Zero Defects:** 

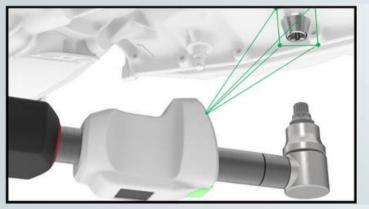
no scrap, no faulty production, no rework, no follow-up inspection, ...



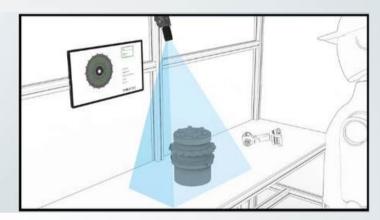
# **TRIMITI**

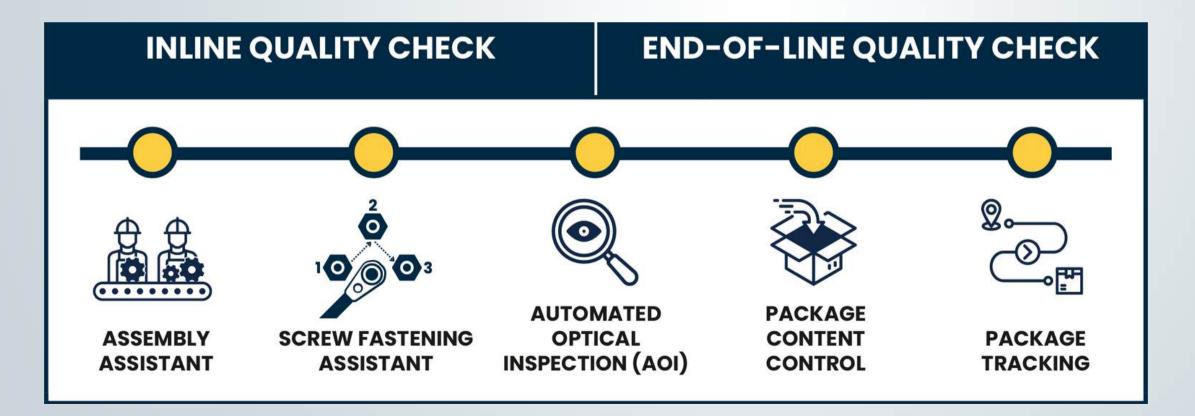
# **OUR READY-TO-PLAY AI-SOFTWARE**

# & APPLICATION EXAMPLES















## **ACROSS ALL LEVELS OF MANUFACTURING:**

- DIGITAL TWIN OF THE MATERIAL FLOW and
- AI- & DATA-DRIVEN PROCESS CONTROL

Workstations, production lines & plants

**END OF PRODUCTION** 

LINE

Manufacturing is

• All steps are **well** 

MES and ERP systems

documented

are updated

automatically

complete

### **DATA & INFORMATION FLOW**



### **Production Control System**



- ERP ensures inventory and worker capacity
- Automated data generation of production in real-time



### **Assembly check**

- In-Line-Identification of defects, verification of correct assembly
- In-Place rework and documentation enabling traceability for all relevant customer requirements



• Storing data of all the manufacturing activities



### Online Configuration

- Customized product
- e.g. color, shape, variant, accessories, stickers,...
- Order set for **ERP system**



## **MATERIAL FLOW**



**Production Planning & Ressource Allocation** 



### **Manual Assembly**

• End-of-line quality check of the assembled product



**Quality Check** 

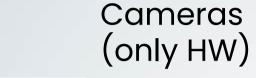


- ERP assigns specific orders to manufacturing
- MES generates the work orders
- Attach label
- Insert Safety Ring
- Install Foam
- Follow the work plan outlined by the **MES**.



# **INTEGRATED SYSTEMS and CONNECTIVITY**

**Production Tools** 



**AR-Glasses** + Drones

Scanners + Projectors















































RS232



Ethernet













## TRACK RECORD AND CUSTOMER BASE

# Markets: <u>Automotive</u>, <u>Machine Building</u>, <u>Medtech</u>, <u>Electronics</u>



Best Practice Use Case in electronics production

1,000,000+ produced units, 0 ppm failure rate realized at automotive tier-1 Vitesco

Two combined Nexustec-applications:

- EOL-check at a fully automated assembly line for power electronics
   parts were automatically checked on defects (18 categories) by AOI
- plus then: assuring manual JISpackaging or rather supervising correct handling of rework parts
   => Avoidance of any mismatches

## **Successful Projects and Clients:**

















# YOUR BENEFITS by AI-ASSURED QUALITY FOR MANUFACTURERS



Nexustec's TRIMITI

**Cost risk by rework + complaints** 

No unexpected rework or complaint



Manual work + QA is a Black Box

Traceability and data generation for all work steps + tools + quality state



Often only limited EOL-control

System solution for inline QA +
Worker Guidance + Process Control



Most software are island solutions

One Software covers all manufacturing activities



Expensive hardware + overhaul services

All <u>hardware is off the shelf</u>







## WHO WE ARE - OUR CAPABILITIES

We help manufacturers in:

1) ZERO Defects & cost reduction 2) SME digitization 3) against shortage of skilled workers

Company: Nexustec GmbH, Munich, Germany

Location: Munich, 1 office, 8 nationalities

Company size: 14+1 employees

Strong know-how in:

- software development
- vision technology (own detection software)

**Business Card** 

industrial production



### Maximilian Kaltenecker, CEO

- with Nexustec since 01/22
- over 10 years industrial experiences in automotive
- amongst others managing director and plant manager



## Sourabh Bodas, CTO

- with Nexustec since 01/15
- extensive experiences in machine learning + computer vision
- researcher at Fraunhofer, Berlin



### **CONTACT:**

Maximilian Kaltenecker, CEO +49-176-20916049

KALTENECKER@NEXUSTEC.EU



**WWW.NEXUSTEC.EU** 



**NEXUSTEC LinkedIn** 



NEXUSTEC YOUTUBE







# Thank you!

CONTACT:
MAXIMILIAN KALTENECKER, CEO
+49-176-20916049
KALTENECKER@NEXUSTEC.EU

SOURABH BODAS, CTO +49-179-4027488 BODAS@NEXUSTEC.EU





