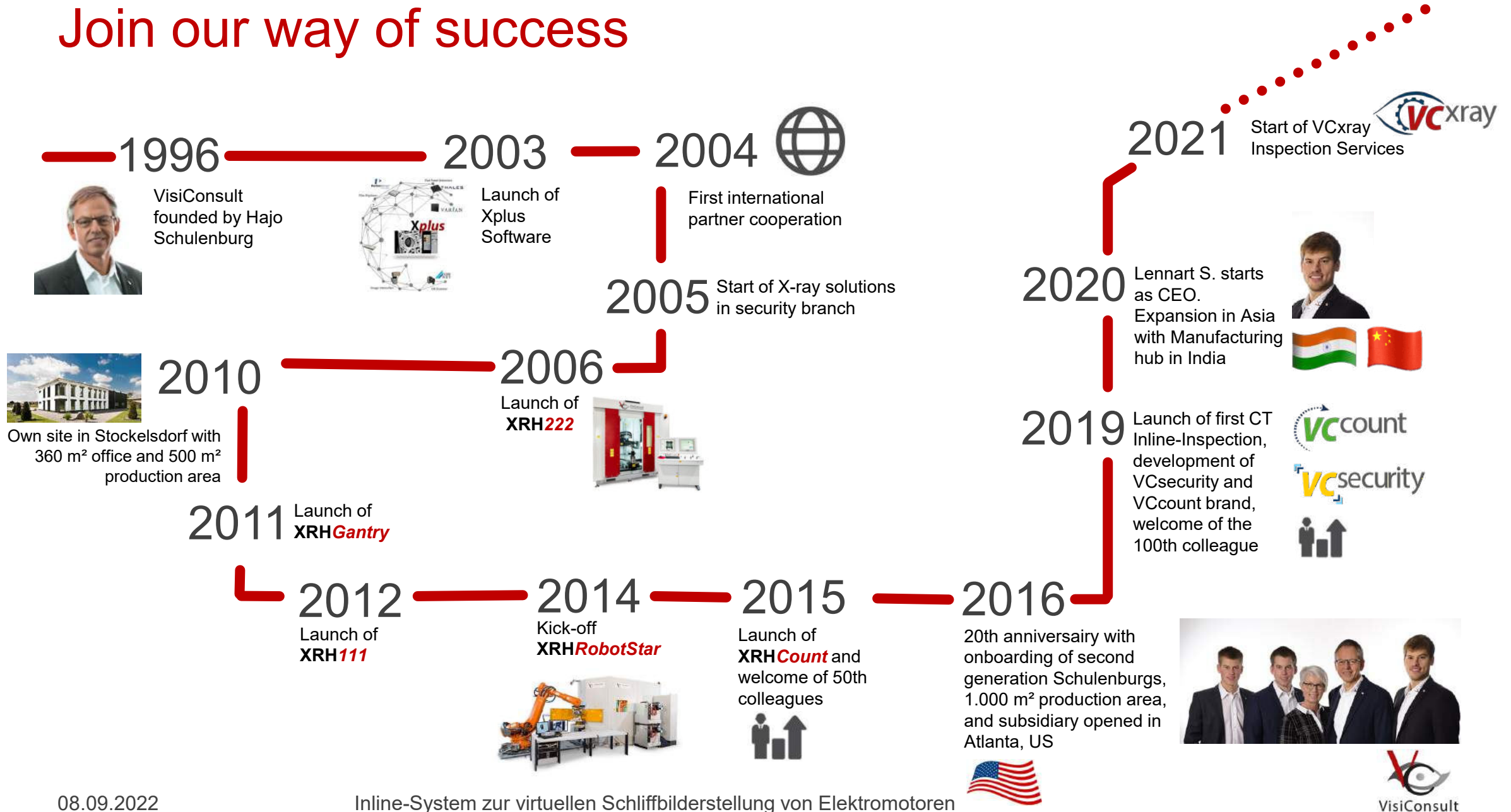




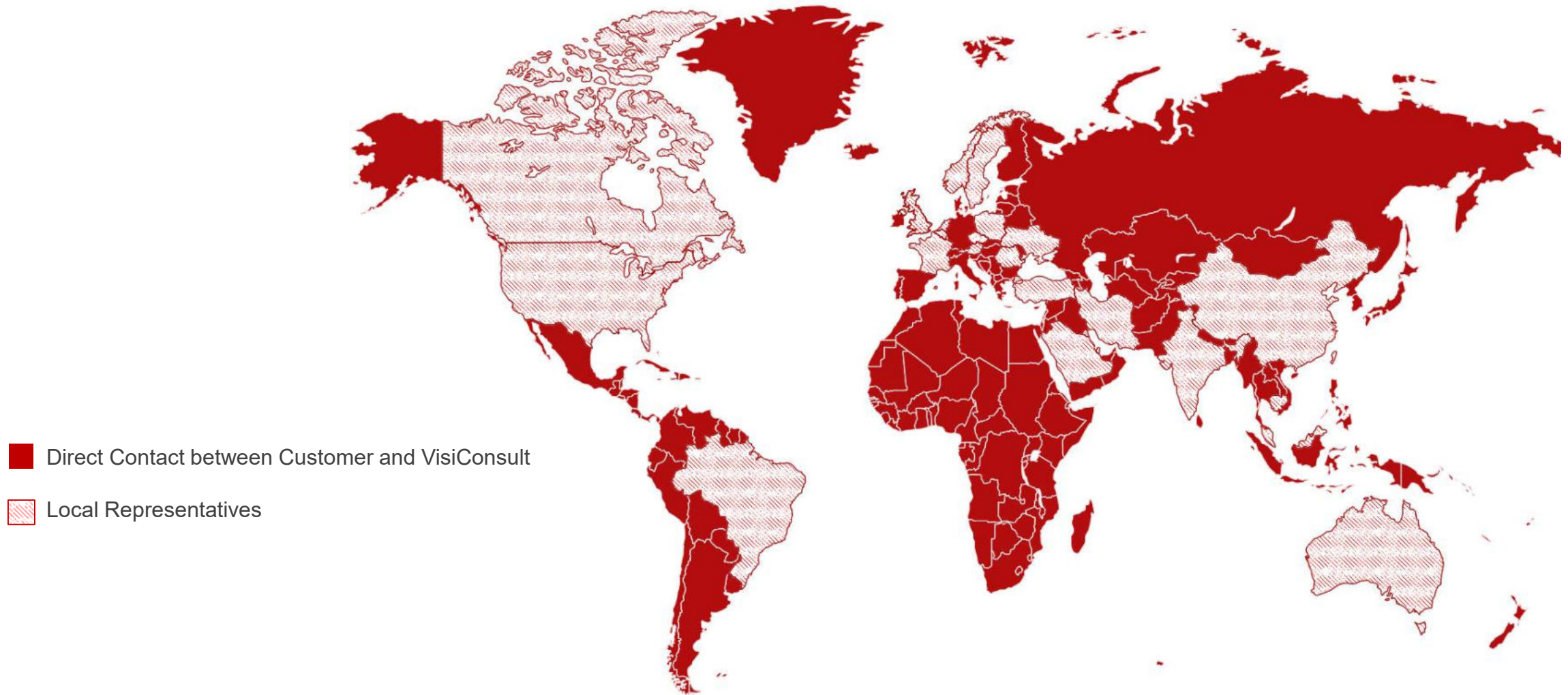
Ein Inline-System zur virtuellen Schliffbilderstellung von Elektromotoren für die Automobilindustrie

Frank Herold

Join our way of success



Contact us from everywhere



NDT Products **Standard cabinets**



130
kV

InSpect

- Small footprint and Compact design
- Film, CR or DR
- Microfocus or Minifocus X-ray tube
- Intuitive and simple touch operation
- Modular setup and automation options



225
kV M

XRH111 ECO

- Visual inspection cabinet
- Budget entry level system
- Full image quality
- Full automation features
- Compact layout



225
kV M A DR CT

XRH111

- Universal inspection cabinet
- Designed for medium parts
- Optional CT and ADR modules
- Full automation features
- Compact layout and mobility



450
kV L A DR CT

XRH222

- Universal inspection cabinet
- Designed for big parts
- Optional CT and ADR modules
- Full automation features
- Most sold system worldwide



450
kV kg A DR CT XL

XRH222 TL

- 600kg heavy duty manipulator
- Loading by crane through roof
- Optional CT and ADR modules
- Full automation features
- Designed for big and heavy parts

NDT Products CT cabinets



XSCTsystem

- Table top system
- For very small parts
- Very high accuracy
- Micro or nano focus tube
- Up to 160 kV



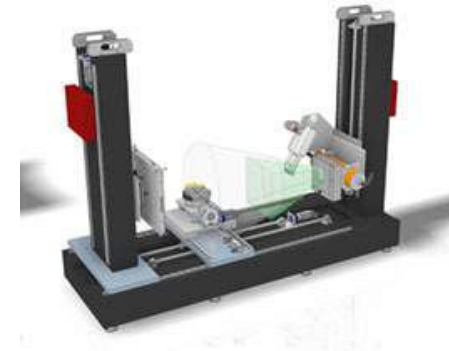
SCTsystem

- Small to medium sized parts
- Nano or micro focus tube
- High accuracy drives
- Dual tube possible
- Granite base
- No mini focus
- Up to 225 kV



MCTsystem

- Medium sized parts
- Dual tube option
- Dual detector option
- Granite base
- Mini or micro focus
- Up to 450 kV



XLCTsystem

- Heavy duty manipulator
- With cabinet or inside bunker
- Dual tube option
- Dual detector option
- Granite base
- Seven axes
- Up to 600kV

NDT Products Customized solutions



- Leading supplier of customized X-ray solutions
- Tailored towards process requirements
- Dozens of high-end reference systems
- From small customizations to complete systems
- Experienced engineering team
- Extensive consulting during concept phase



***Don't adapt to the system!
Let the system adapt to
your process!***



E-Mobility Component Example

Rotorblechpaket/
Laminated core

Kurzschlussring
mit Lüfterschaufeln/
Shorting ring with fan blades

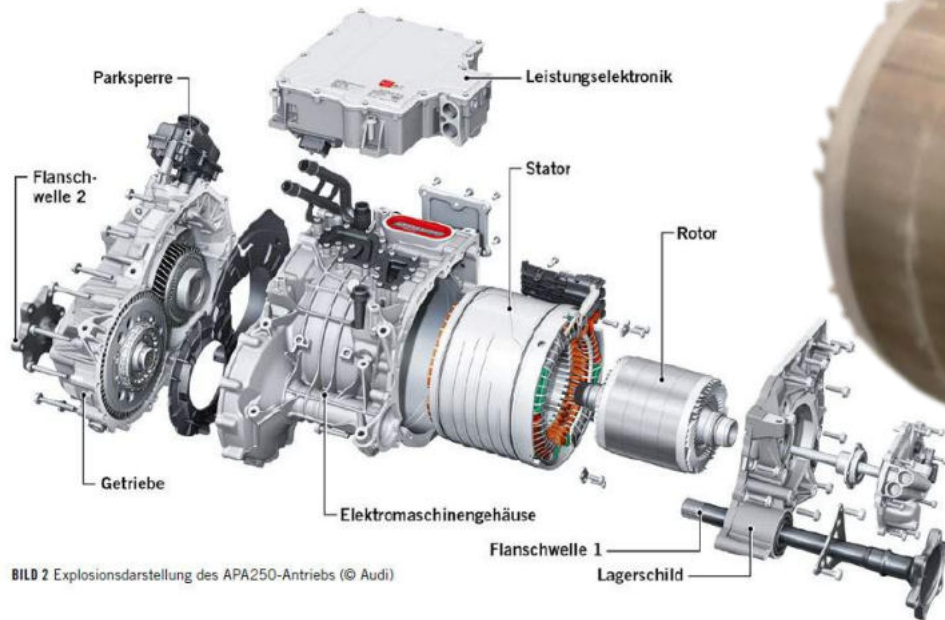
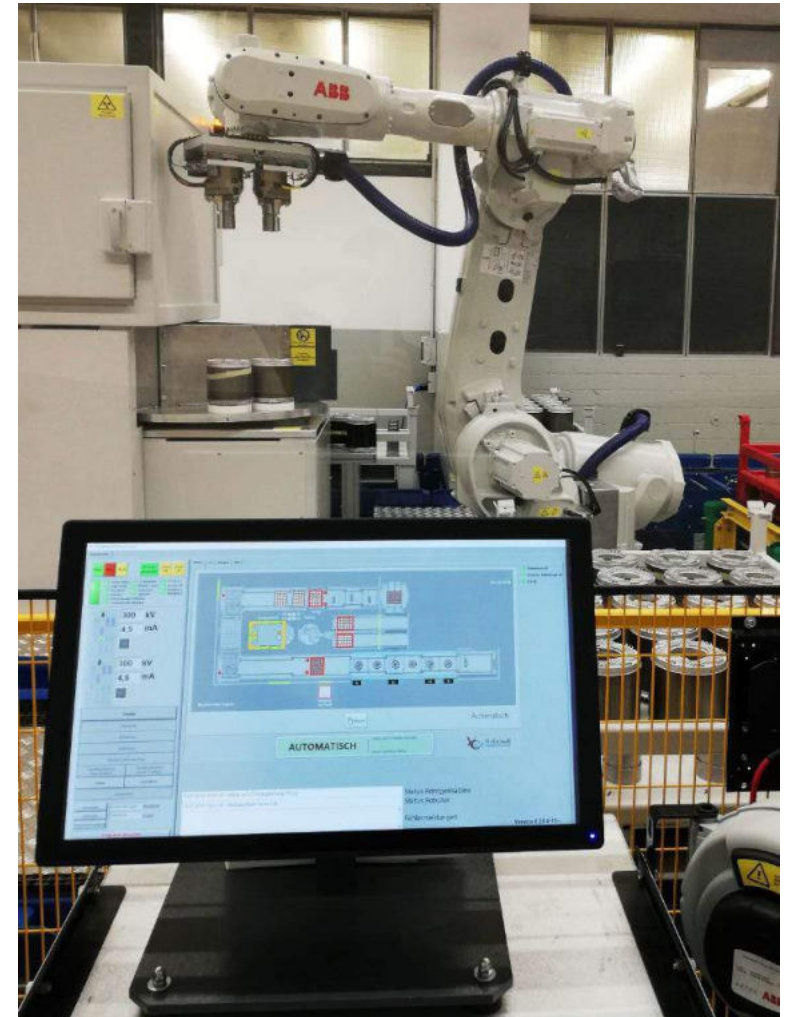
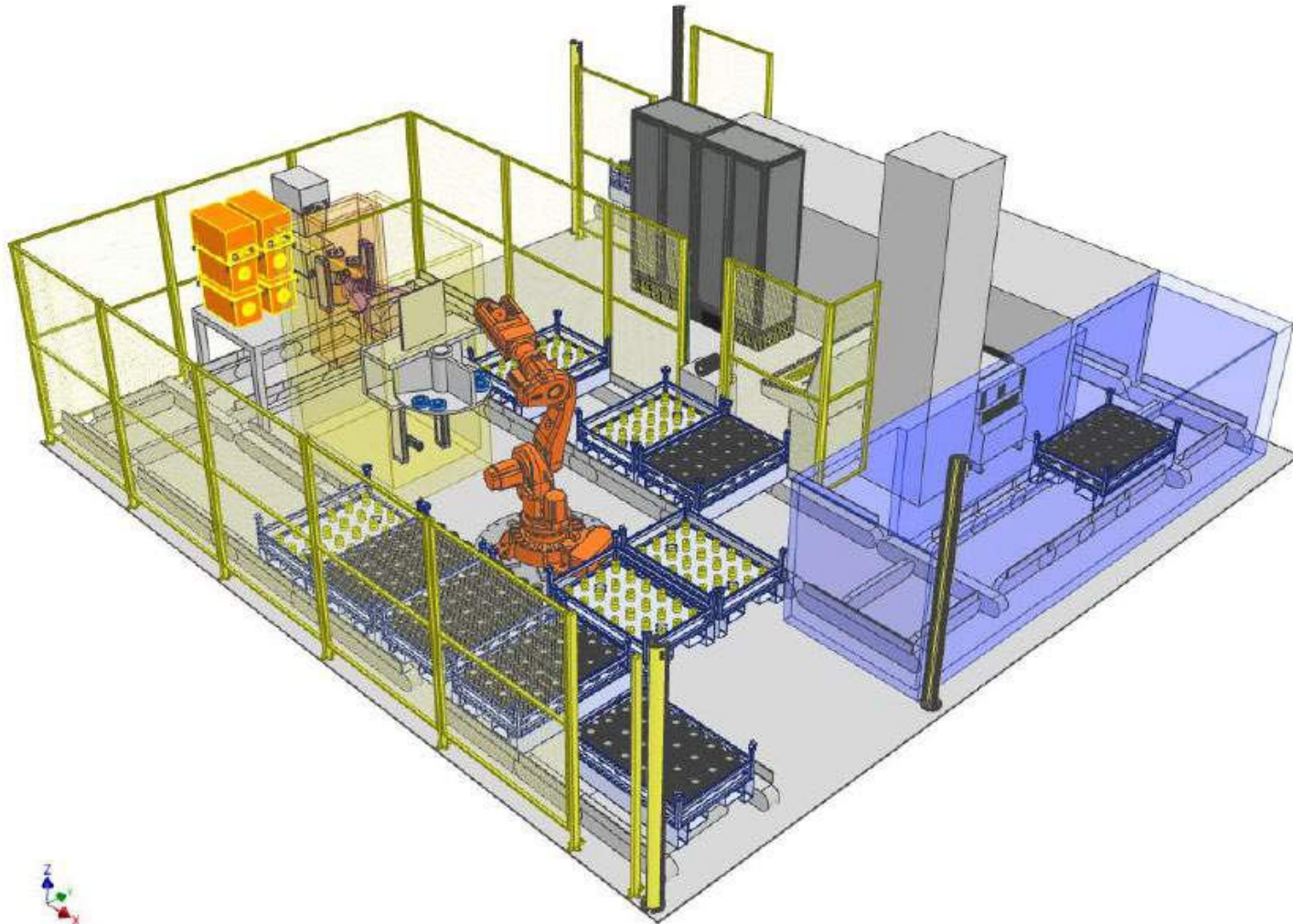


BILD 2 Explosionsdarstellung des APA250-Antriebs (© Audi)

Aluminium-Kurzschlusskäfig/
Aluminum squirrel cage

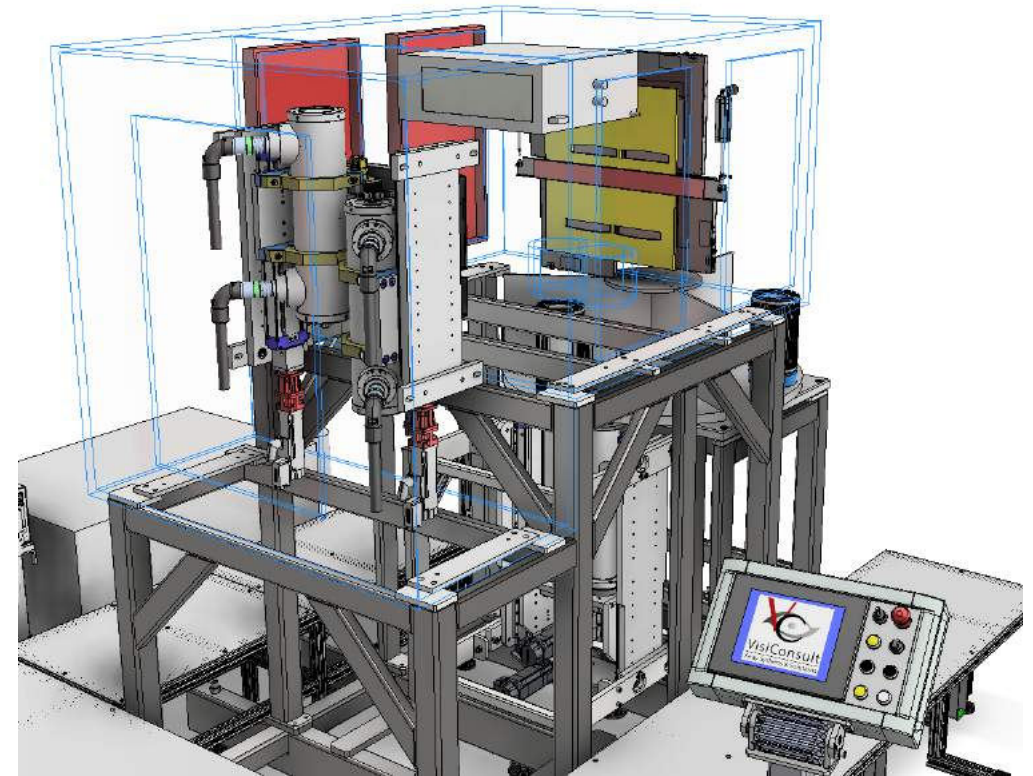
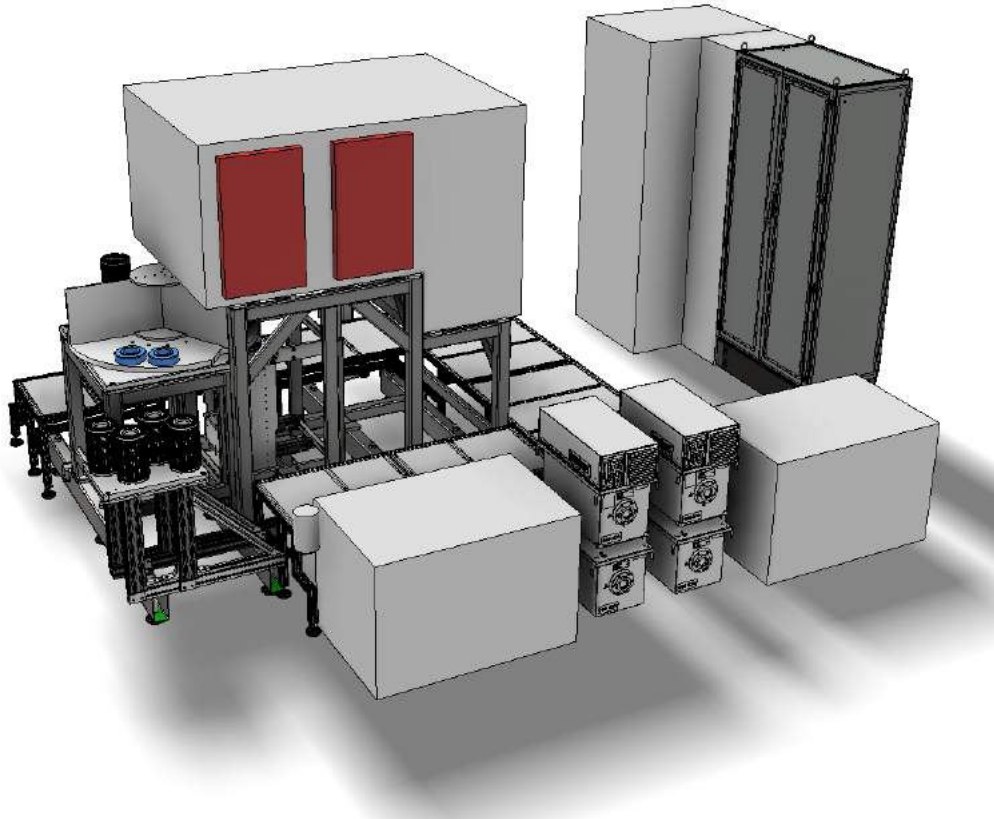
CT Inline Inspection with **XRH**RobotStar



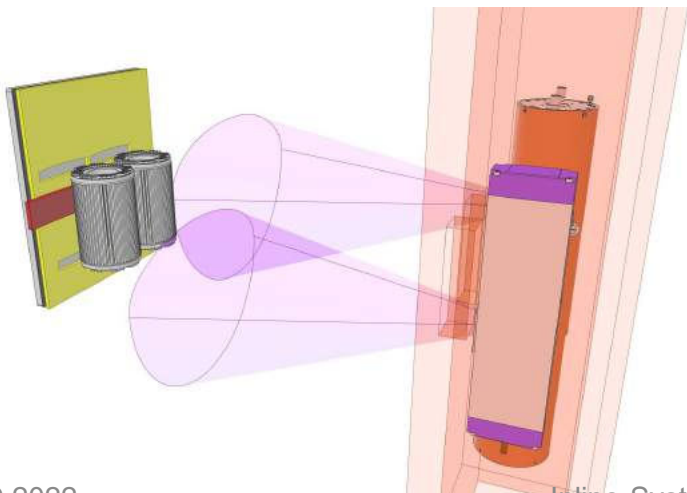
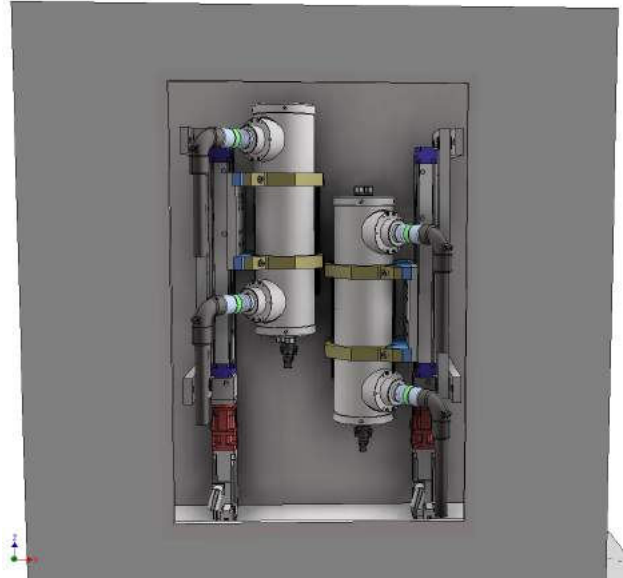
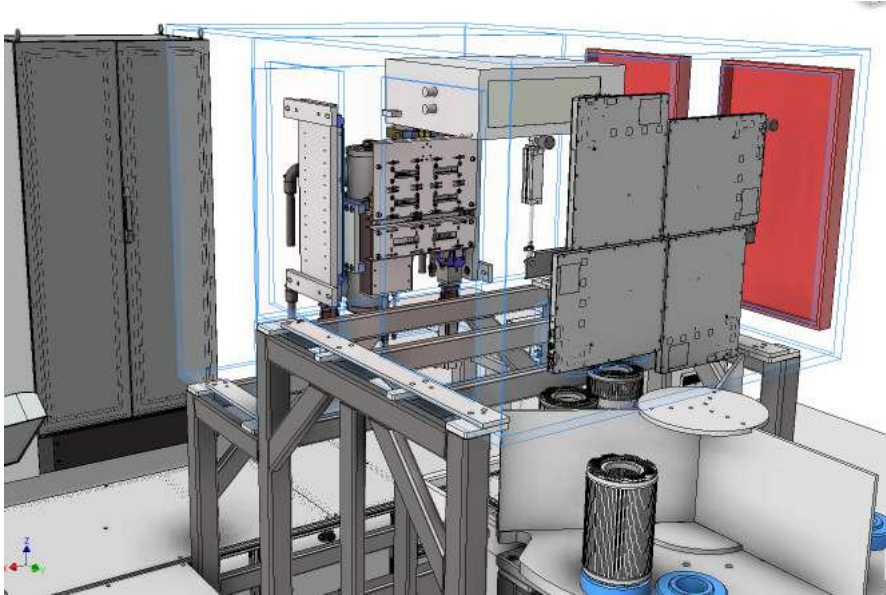
08.09.2022

Inline-System zur virtuellen Schliffbilderstellung von Elektromotoren

CT Inline Inspection with **XRH***RobotStar*

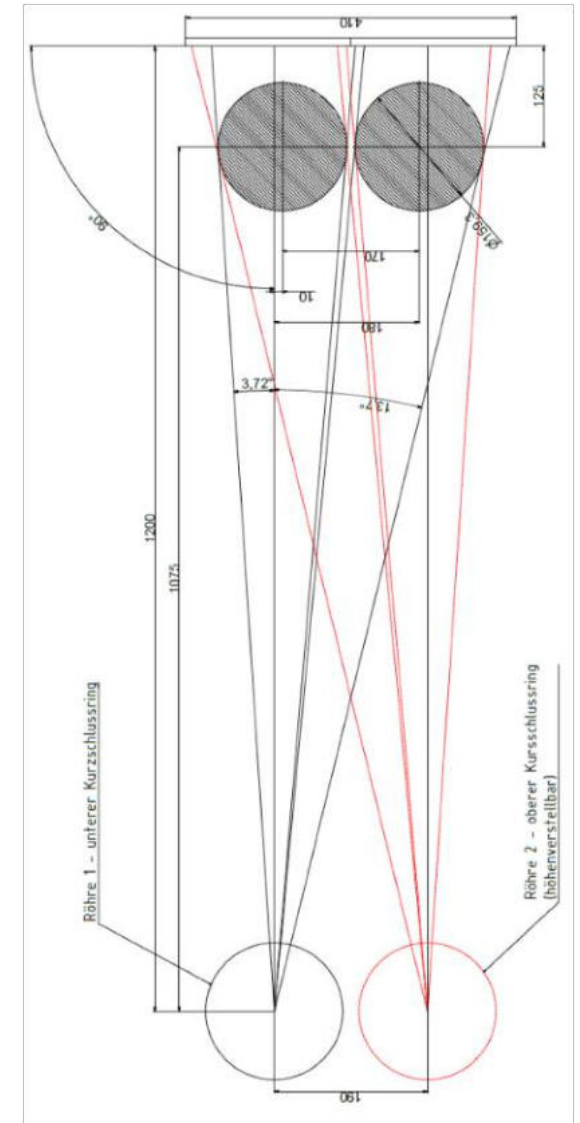


CT Inline Inspection with VGinLINE

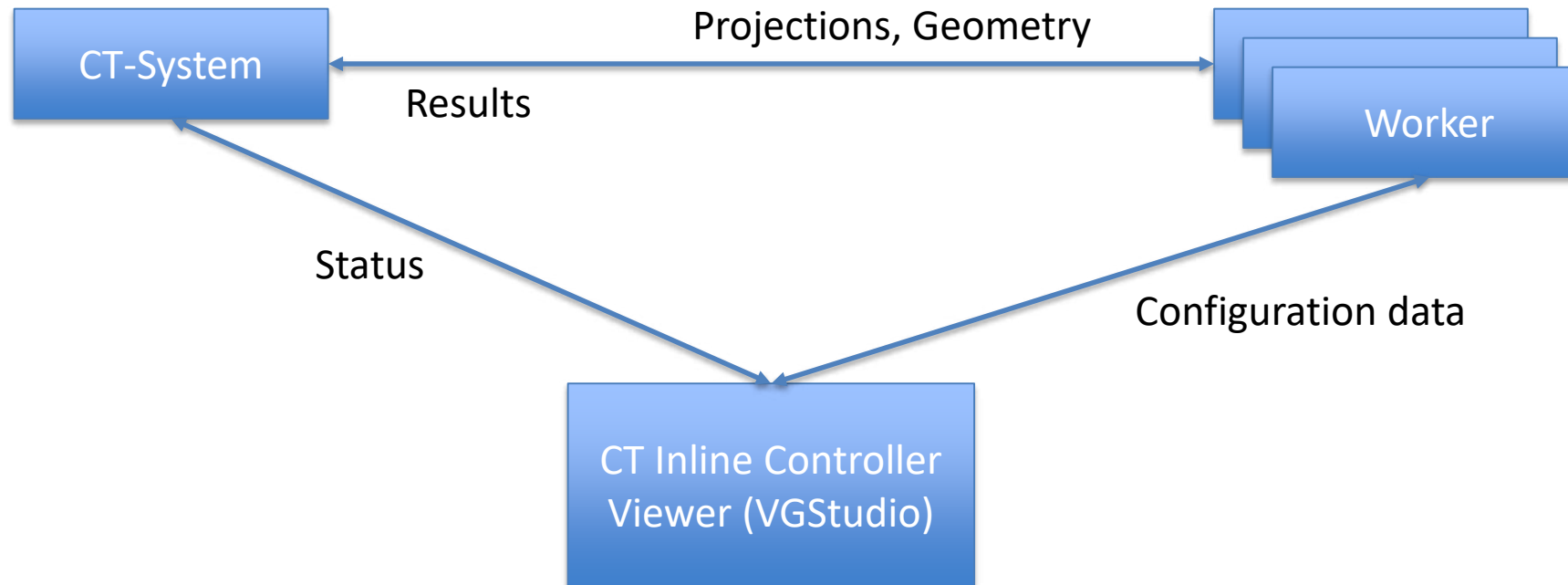


Two rotor types:

- Long
- Short

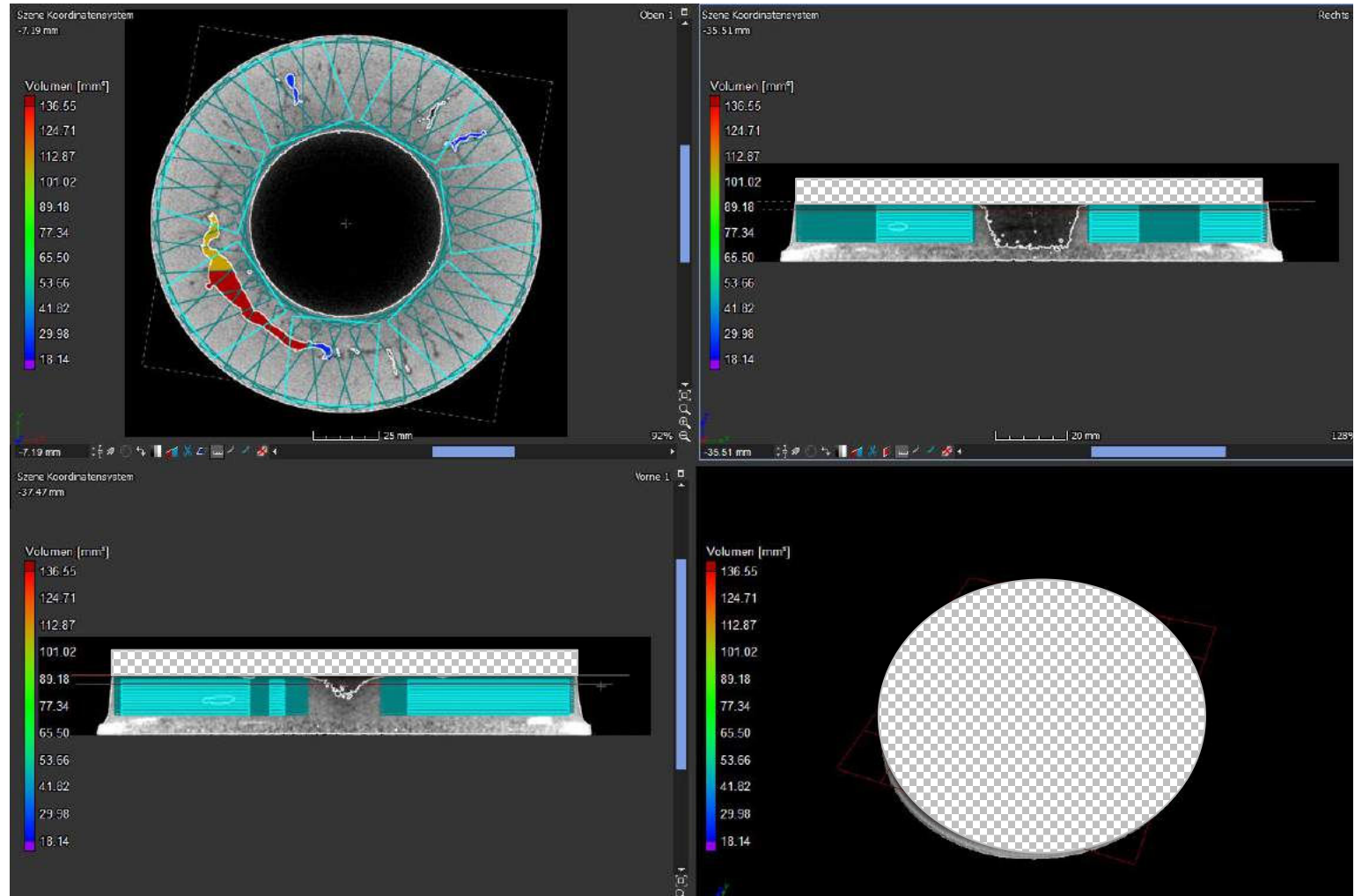


CT Inline Inspection with VGinLINE

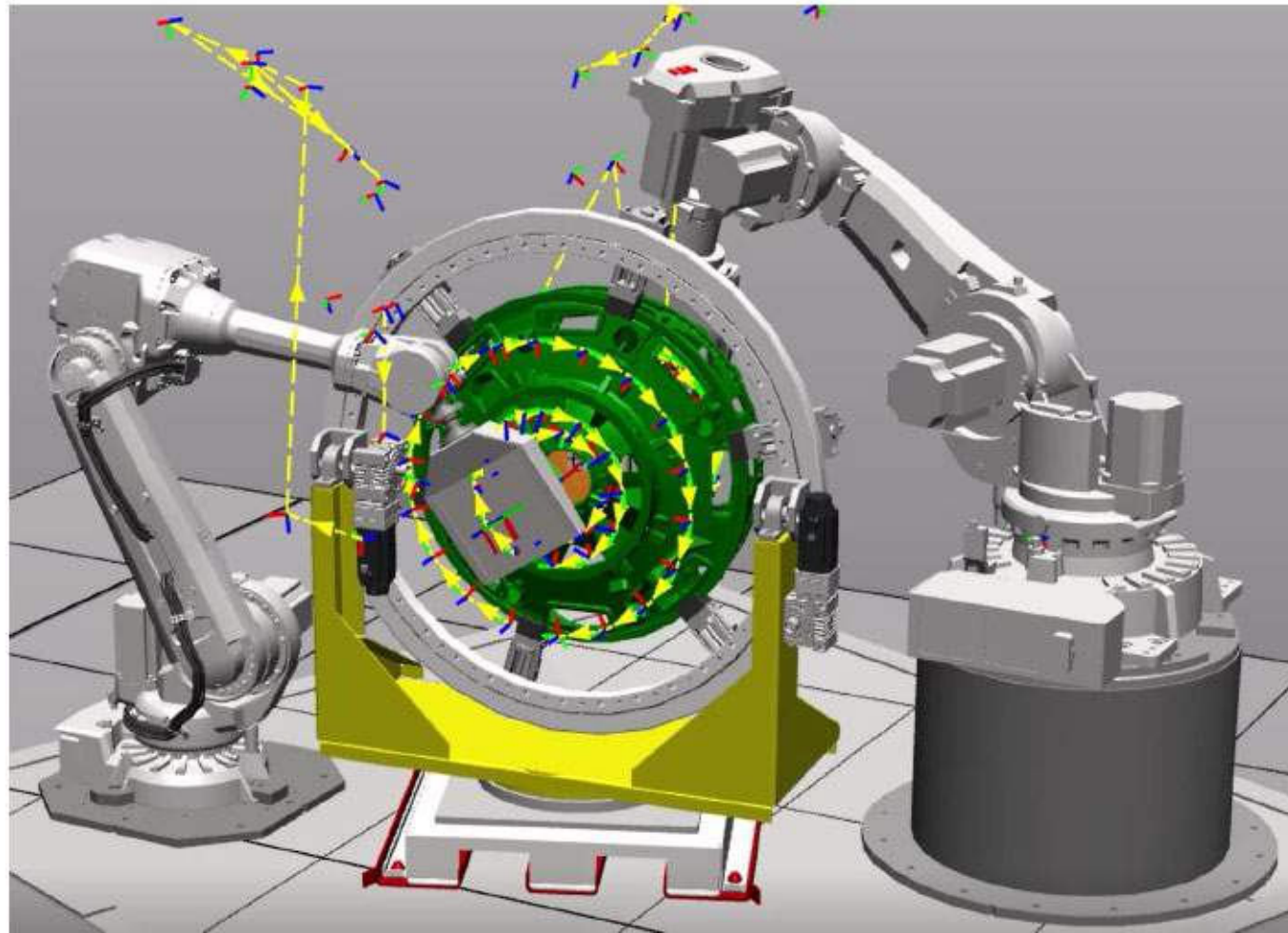


CT Evaluation

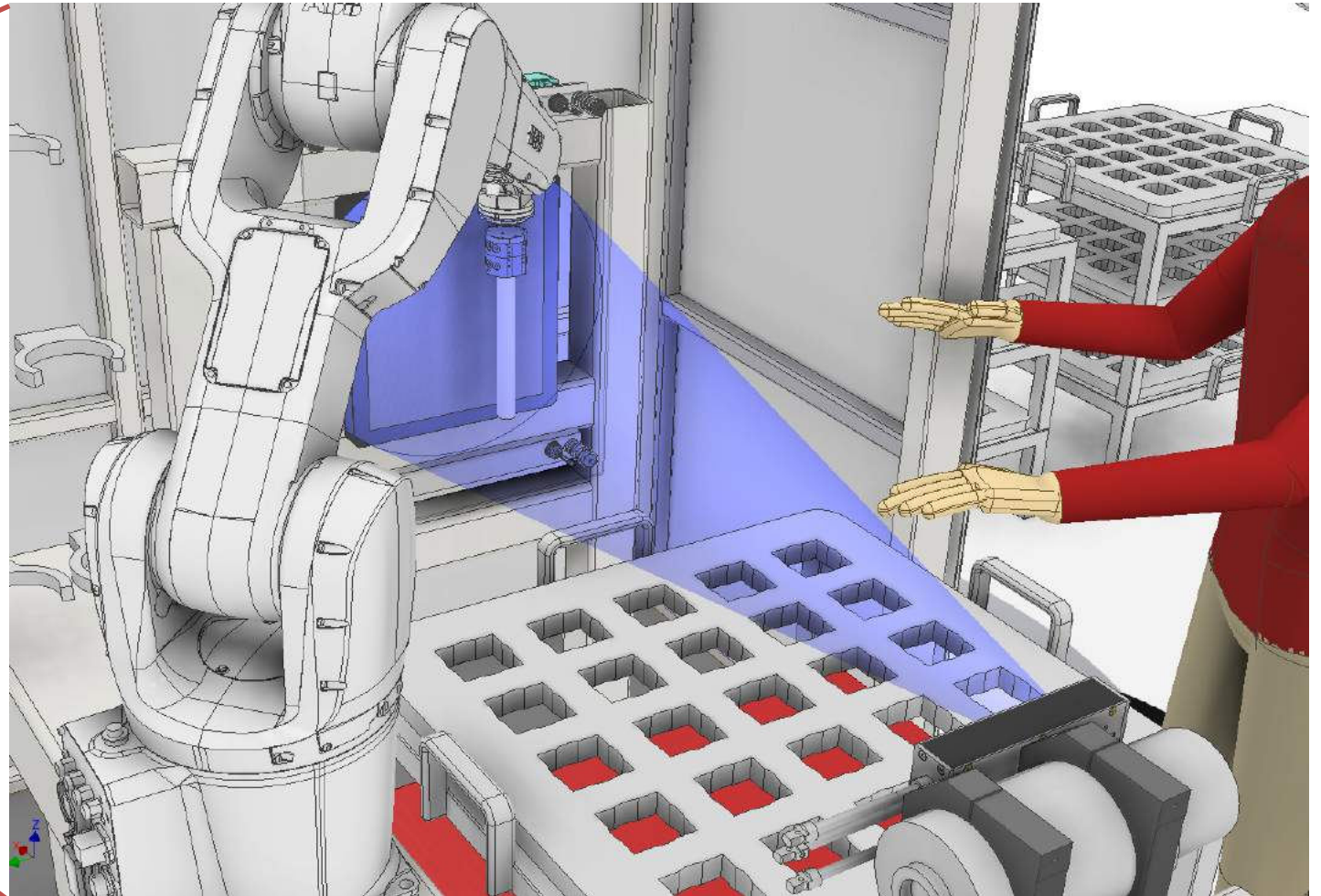
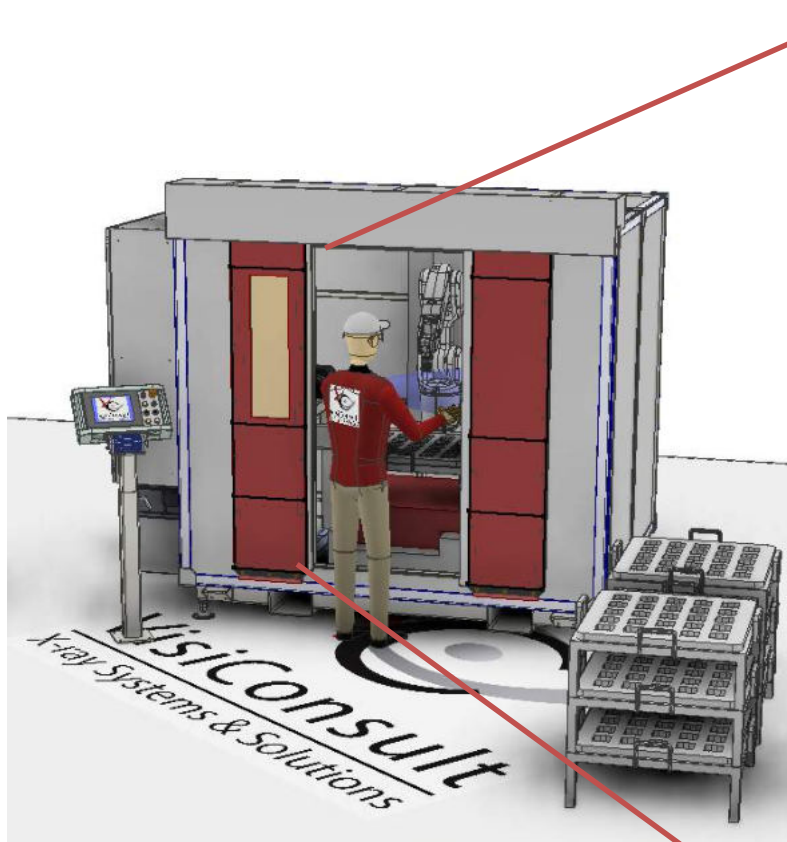
- Computed Tomography for non destructive evaluation
- Automated decision making via VGINLINE
- Fully integrated into system control and part disposition



Simulation – Virtual Applications

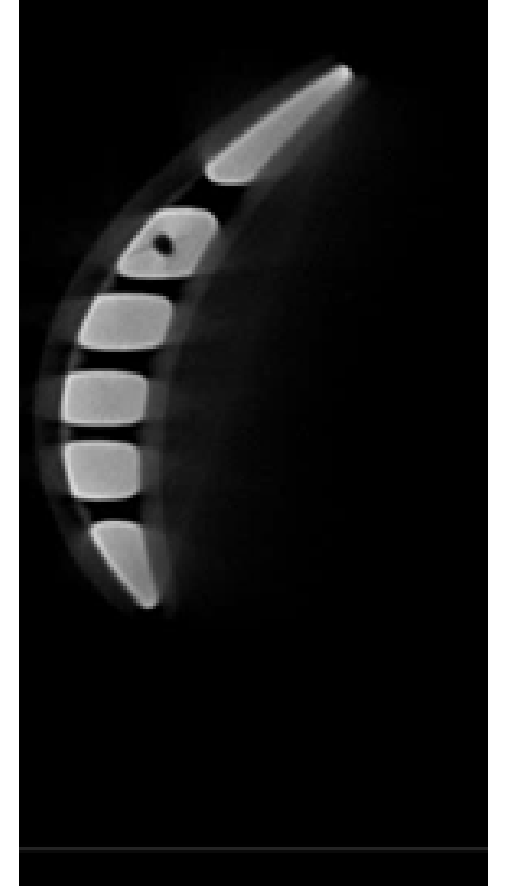
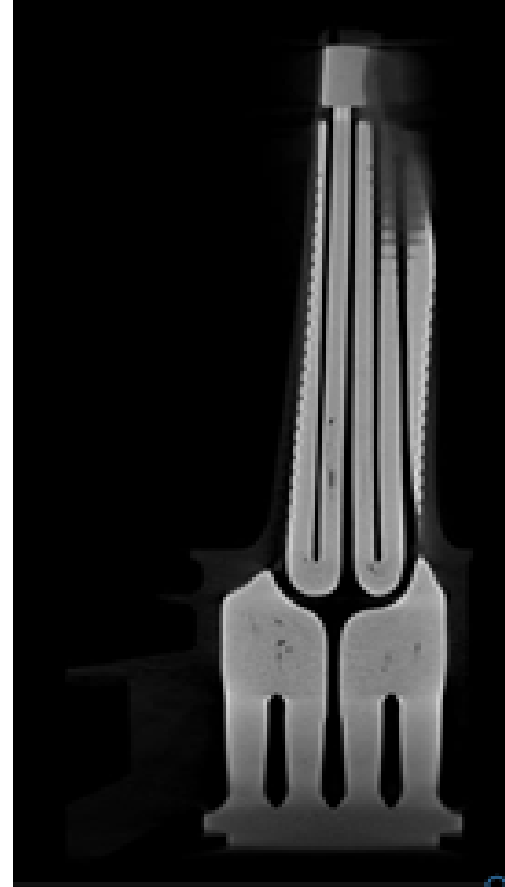


Outlook: Robotic Turbine Blade Inspection



- High production turbine blade inspection
- ADR and CT capable
- Automatic gripper changing for many unique parts

Outlook: Turbine Blade Wax Mold solution – fast/inline CT



- X-ray system underneath with robot loading from top
- Automated and manual part loading possible
- Less than 30 second, multi-part scan with automatic image processing using VGenLine!

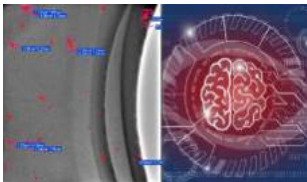
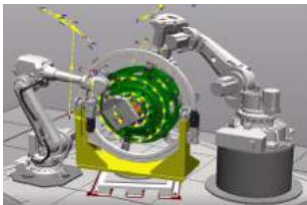
Industry 4.0 related to NDE



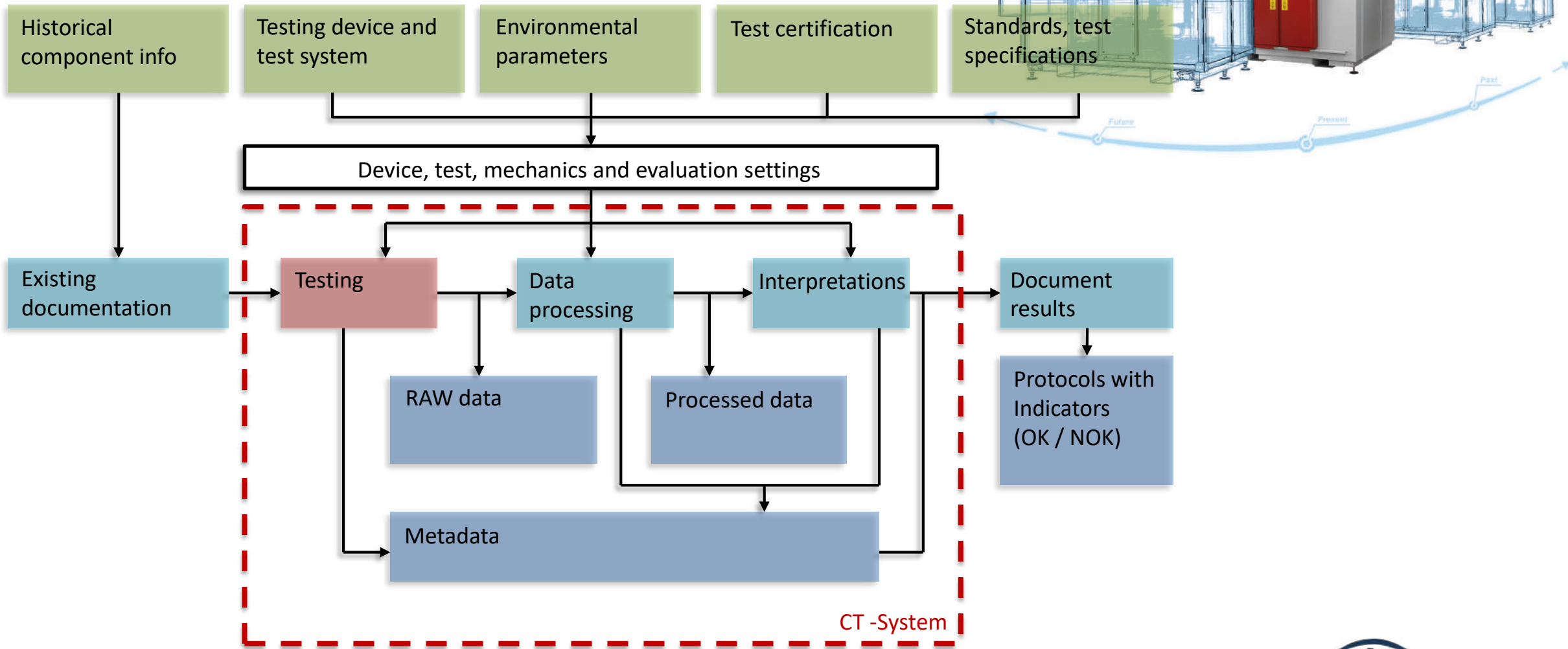
Digitization

Digitalization

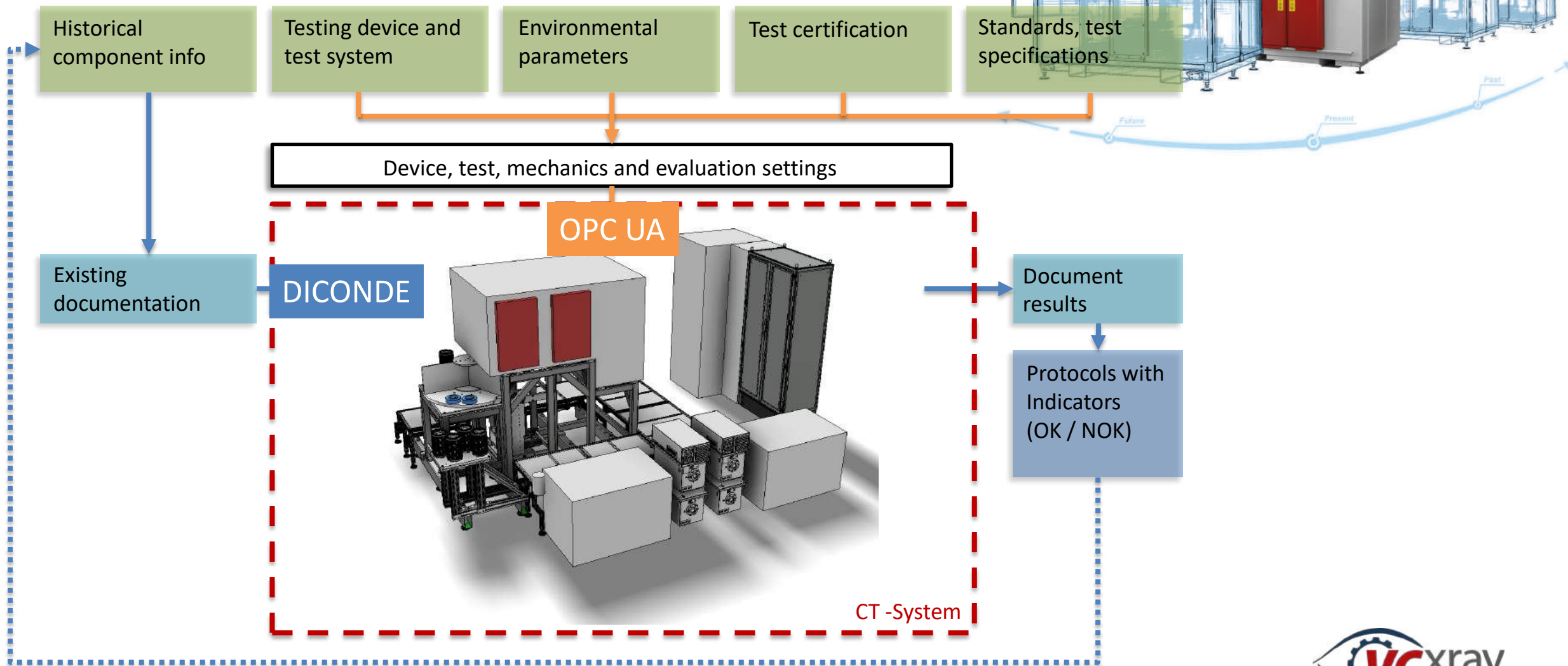
Digital Transformation



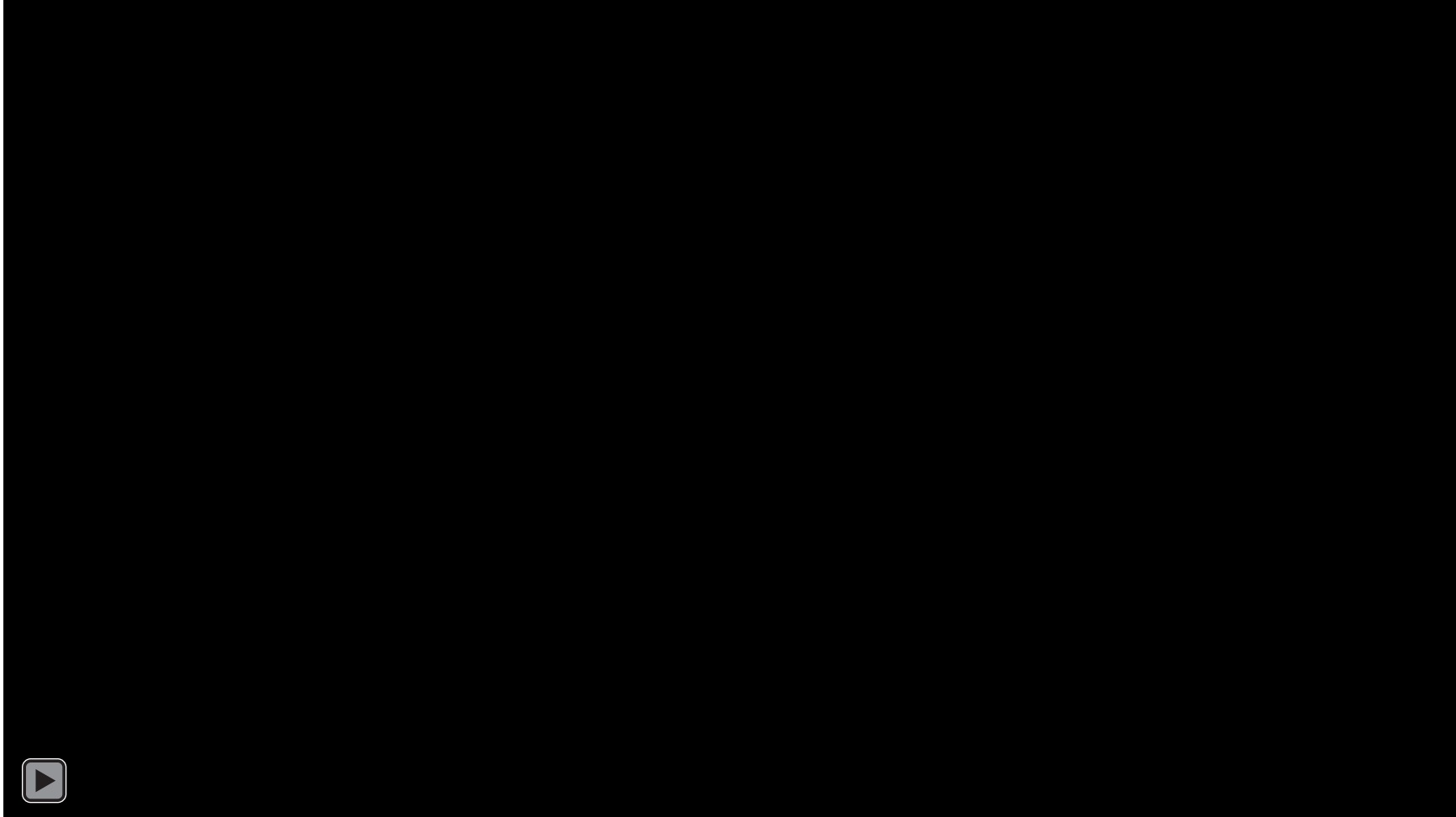
ZfP 4.0 / NDE 4.0 – Process



ZfP 4.0 / NDE 4.0 – Process



Movie – Inline CT



Thank you for your attention!



General Conversion

Intuitive unit converter including distances, time, weight and many more.

Geometric Calculations

Calculate geometric / optimal magnification, unsharpness and many more within seconds.

Computed Tomography

Quick calculation of projections, required energy, geometric values and much more.

X-Ray Standards

Comprehensive overview about all X-ray ASTM and ISO standards

IQI Calculations

Overview and converter for many different Image Quality Indicators.

Formulas & Glossary

Extensive overview and explanations of common formulas and terms.

