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

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Join our way of success

1996
VisiConsult founded by Hajo Schulenburg

2003
Launch of Xplus Software

2004
First international partner cooperation

2005
Start of X-ray solutions in security branch

2006
Launch of XRH222

2010
Own site in Stockelsdorf with 360 m² office and 500 m² production area

2011
Launch of XRHGantry

2012
Launch of XRH111

2014
Kick-off XRHRobotStar

2015
Launch of XRHCount and welcome of 50th colleagues

2016
20th anniversary with onboarding of second generation Schulenburgs, 1.000 m² production area, and subsidiary opened in Atlanta, US

2019
Start of VCxray Inspection Services

2020
Launch of first CT Inline-Inspection, development of VCsecurity and VCcount brand, welcome of the 100th colleague

2021
Lennart S. starts as CEO. Expansion in Asia with Manufacturing hub in India

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Inline-System zur virtuellen Schliffbilderstellung von Elektromotoren
Contact us from everywhere

- Direct Contact between Customer and VisiConsult
- Local Representatives
NDT Products Standard cabinets

**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

**XRH 111 ECO**
- Visual inspection cabinet
- Budget entry level system
- Full image quality
- Full automation features
- Compact layout

**XRH 111**
- Universal inspection cabinet
- Designed for medium parts
- Optional CT and ADR modules
- Full automation features
- Compact layout and mobility

**XRH 222**
- Universal inspection cabinet
- Designed for big parts
- Optional CT and ADR modules
- Full automation features
- Most sold system worldwide

**XRH 222 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 cabins

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

**SCT system**
- 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

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

**XL CT system**
- Heavy duty manipulator
- With cabinet or inside bunker
- Dual tube option
- Dual detector option
- Granite base
- Seven axes
- Up to 600 kV
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
- Aluminium-Kurzschlusskäfig/ Aluminum squirrel cage
CT Inline Inspection with XRH RobotStar
CT Inline Inspection with XRH RobotStar
Two rotor types:
- Long
- Short
CT Inline Inspection with V GinLINE

CT-System

Projections, Geometry

Results

Status

Configuration data

Worker

CT Inline Controller Viewer (VGStudio)
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 VGinLine!
Industry 4.0 related to NDE

NDE 1.0
- Load part
- Place IQIs, Lead ...
- Expose film
- Remove film + IQI
- Develop film
- Evaluate film

NDE 2.0
- Load part
- Adjust parts
- Unload part
- Evaluate images

NDE 3.0
- Load part
- Unload parts
- Evaluate images

NDE 4.0
- Load part
- Unload parts

Digitization
- Digitalization
- Digital Transformation

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ZfP 4.0 / NDE 4.0 – Process

Historical component info
Testing device and test system
Environmental parameters
Test certification
Standards, test specifications

Device, test, mechanics and evaluation settings

Existing documentation
Testing
Data processing
Interpretations
Document results

RAW data
Processed data
Metadata

Protocols with Indicators (OK / NOK)

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DICONDE

OPC UA

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Movie – Inline CT
Thank you for your attention!