IN-LINE REAL TIME QUALITY CONTROL

Operational excellence driving quality and industrial performance



Your expectations

Challenged by the necessary upscaling of businesses and accelerating innovation and the need to upmarket, you are seeking to transform your business in order to strengthen your operational excellence.

To maximize your performance in terms of productivity and quality, while reducing your costs, Cetim's In-Line Real time Quality Control offer responds to several major challenges:

- Ensure product conformity and increase customer satisfaction
- Reduce scraps and associated costs
- Ensure reliable production quality
- Guarantee the repeatability of your controls
- Ensure the product traceability
- Deal with lack of qualified and skilled manpower
- Increase production rate and avoid bottlenecks
- Reduce your environmental footprint

In-Line Real time Quality Control is undoubtedly a strategic tool in this approach, enabling several important production features to be monitored and controlled, such as:

- Presence or absence of a component
- Appearance (defects, colours, etc.)
- Metrology, dimensions and geometry
- Functional defects (tightening, sealing, force, torque, etc.)
- Chemical composition
- Material health, treatments, coatings
- Residual stresses
- Defects characterisation (surface and volume)
- Cleanliness, including particulate cleanliness

Our solutions



As a technological accelerator and innovation key player, we focus our skills on operational excellence in production.

Thanks to our R&D capability, we develop and deploy, as soon as possible, the best technological and organizational solutions, and support you to keep ahead on the most competitive markets

According to your production system maturity, our 360-degree approach support you on any step or the entire value chain:





Phase 1: Diagnosis

- Assessment of the Quality and Control management system by means of an audit of production and control facilities and a documentary inspection of the products.
- Identification of the cause of non-conformity, if any, and assessment of its cost

Phase 2: Industrial organisation enhancement

- Support for problem solving
- Document analysis reviews (P-D-FMEA, etc.)
- Processus operation evaluation and quality maturity assesment
- Improvement recommendations

Phase 3: Product design optimisation

- Product analysis to identify control failure
- Advice on product design and sizing to enable production control

Phase 4: Technical and economic feasibility

- Measurement method selection, standard or tailor-made, according to the customer context
- Validation of the method's suitability with the production line conditions

Phase 5: Definition of the solutions to be implemented

- Technical specifications
- Suppliers recommendation & sourcing

Phase 6: Qualification of selected solutions

- Equipment procurement
- Design/selection of reference parts to test the method based on the identified nonconformity

Phase 7: Solution integration and industrialisation

Support for integration and industrialisation in series production conditions

Phase 8: Train your staff

- Testing method implementation
- Machine usage and maintenance

Phase 9: Follow-up audit

• Look at inspection and histories to see how we can improve the technology and use the most up-to-date systems.

Discover real-life cases on video

Quality control of welds

NDT Defectology

Artificial intelligence-assisted magnetic particle inspection

Your benefits

Tailor-made support and recognised expertise

When you call on Cetim to support you in your projects to automate your on-line controls, you will benefit from:

- 20+ years of experience, covering expertise in industrial organisation, inspection, testing and mechanical data analysis
- More than 70 experts with multi-disciplinary skills and multi-sector experience, specialised in testing and measurement
- The expertise of more than 40 COFREND level 2 and 3 and COFFMET-certified inspectors
- A player in standardisation and regulatory bodies in France and internationally
- A neutral and impartial technical centre





- A unique R&D capacity with industrial and academic partners network
- Quatrium® platforms with a wide range of equipment to de-risk your projects and validate your solutions Discover Quatrium equipment on video in a <u>dedicated Playlist</u> which is constantly growing on our Youtube channel ... Dimensional control in production, welding monitoring by infrared thermography, automatic defect detection by fluorescent magnetoscopy, automatic aspect control....

