



DIGITAL MANUFACTURING PLATFORMS
FOR CONNECTED SMART FACTORIES

QU4LITY_ALUM

Newsletter - February 2022

Zero Defect Manufacturing for Aluminum Extrusion Industry

Dear Reader,

A few months ago, we have become a family member of the project QU4LITY and its wider ecosystem. We are proud winners of the open call **Grant Agreement number 825030** that aims to apply the zero-defect manufacturing (**ZDM**) concept to the Aluminum Extrusion Industry. The **QU4LITY_ALUM project** will offer increased quality and efficiency, reduce waste and lower cost while maintaining the extrusion field competitive in the post COVID-19 era. With this project, we will focus in the compensation of possible disruptions at the early production stages of the project in order to provide the finest product quality by the 1st pass yield.

This newsletter will share with you the project objectives and the impact that will have not only within the company's premises but also towards the environment and our goal for a sustainable future!

Project Objectives



Our company and the QU4LITY_ALUM experiment will exploit the opportunities of the **Artificial Intelligence (AI) technology and Autonomous Quality (AQ) system** and thus support the Aluminum Extrusion Industry to the next industrial revolution, to “**Industry4.0**”. In order to succeed in our mission, during the nine-months duration of the project that started from September 2021, we will be part of the pilot that works on predictive maintenance implementing enhanced quality control capabilities to ensure the finest product quality for our esteemed customers and stakeholders. At the same time the pilot supports the acceleration of the **Industrial digital transformation** and [EXALCO](#) through the pilot will become a QU4LITY member and a trigger for **smart manufacturing** to its wider business collaboration ecosystem. Moreover, the benefits of the pilot can account towards a work-cell quality management, affecting the whole value chain and reducing scrap generation and propagation to the minimum

EXALCO supports green orientation!

Through this project and experiment, [EXALCO](#) shows its interest and proactively **supports the green-oriented efforts of the EU**, aiming to a



greener transition through the possibility of reducing scrap and unnecessary actions that increase its environmental footprint! The impact of the project on [EXALCO](#) is mainly focused on **improving production quality** while increasing productivity, informed planning of maintenance activities and asset life extension as well as production effectiveness and service efficiency.

InnovateUp

Today, the AI-powered solutions are the driving force towards Industry4.0. **Smart Quality Assurance** has filled with interest the manufacturers focusing on moving from traditional methods to exploit innovative ways to ensure high-quality standards and process improvement. In this direction, **QU4LITY_ALUM** and our company [EXALCO](#) identify the potential of AI-powered Predictive Quality solutions. The **Autonomous Quality solution** is tailored towards the needs of Aluminum Extrusion Industry in order to provide quality products, to cope with stakeholders' requirements and relieve customer pains.





EXALCO shares the vision of Autonomous Quality and Zero-Defect Manufacturing

EXALCO, as a QU4LITY family member, is a supporter of the **Manufacturing Digitalization**. Thus, the company shares the vision of the next “**Industrial Revolution**” and Second Open Dialog “Standardization needs and requirements towards AQ & ZDM” in the framework of **DFA’s Zero-X Digital Manufacturing** initiative. The event addressed various topics included security, artificial intelligence, data interoperability and quality in order to move towards the identification of standardization needs and our common goal of AQ and ZDM digital advance. The exchange of views and information was beneficial for all the participants and only through continuous discussions progress will be made.

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EXALCO
ALUMINIUM SYSTEMS

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