

Wood Equipment - Biesse i4Q outputs will provide means to adapt company's processes to the recorded working conditions providing a way to correct process drifts.



Metal Machining - Fidia i4Q solutions will improve the workpiece final surface quality, avoid chatter insurgence and pinpoint components wear on company's machinery.



White Goods - Whirlpool i4Q will reuse company's available data of current product's quality allowing the certification of product conformity at serial number level.



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Metal Equipment - Factor



Ceramics Pressing - Riastone i4Q will improve the production efficiency by controlling the quality of raw matters, through new and advanced data driven processes.



Plastic Injection - Farplas 14Q will complement and optimize the plastic injection manufacturing processes with an automatic advanced inspector based on AI.



www.i4Q-project.eu https://fundingbox.com/

- https://www.linkedin.com/company/i4q-project
 - https://twitter.com/l4qProject
- https://www.facebook.com/i4QProject

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Starting date: 01/01/2021 Duration: 36 months Overall budget: €11 442 342,50 EU Contribution: €9 997 485,88 H2020-NMBP-TR-IND-2020-singlestage DT-FOF-11-2020 - Quality control in Smart Manufacturing (IA)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 958205

Industrial Data Services for Quality Control in Smart Manufacturing



Manufacturing companies are continuously facing the challenge of redesigning and adjusting their manufacture systems.

They adapt their processes to produce goods adapted to specific requirements and produced under the minimum required production rate, guaranteeing high quality and limiting the use of resources in order to reduce waste, scraps and defects, as well as production costs and lead times to pursue manufacturing excellence.

Current solutions show four major drawbacks:

- Excessive amount of generated data needed to be managed during manufacturing processes

- Complexity of existing solutions unaccessible for SMEs

- Dynamic behaviour of the manufacturing factories and ecosystems

- Suitable modelling, simulation and data fusion techniques of diverse, connected and interdependent entities

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Establish the **State** of the Art in terms of technologies for quality in manufacturing and to set the requirements driving the creation of i4Q solutions.

Build **i4Q** Manufacturing Data Analytics, a set of management tools for cloud or edge lifecycle of manufacturing related artificial intelligence models. Design i4Q Framework and Reference Architecture built on top of key smart manufacturing digital models and ontologies with focus on business, usage, functional and implementation view-points.

Build **i4Q Rapid Manufacturing Line Qualification and Reconfiguration**, a set of strategies for process qualification, reconfiguration and optimisation. Build **i4Q Manufacturing Data Quality**, providing methodologies, tools and infrastructure to ensure the necessary data quality to enable operational intelligence.

Test and validate all i4Q Solutions through piloting on **6 different use cases**, covering several manufacturing perspectives across multinational and separate industrial sectors.