DELIVERABLE 3.1

Specifications of the online data gathering systems for each application

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Disclaimer

Partners

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1	INSTITUTO TECNOLÓGICO DE ARAGÓN	ITAINNOVA	Spain
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[1] **Types. R:** Document, report (excluding the periodic and final reports); **DEM:** Demonstrator, pilot, prototype, plan designs; **DEC:** Websites, patents filing, press & media actions, videos, etc.; **OTHER:** Software, technical diagram, etc.

[2] **Dissemination levels. PU:** Public, fully open, e.g. web; **CO:** Confidential, restricted under conditions set out in Model Grant Agreement; **CI:** Classified, information as referred to in Commission Decision 2001/844/EC.

Executive Summary

This deliverable summarizes the outcome of STREAM-0D Task 3.1 and is related to the data that need to be gathered for each application. These data include the current measurement systems, improvements of these current systems and new systems to be installed in order to reach the project objectives. The initial list of process parameters, performance indicators and product-related measurements / parameters and variables is presented. This will help both the data acquisition, the modelling and the Data Driven Models that will be utilized to achieve (near) zero defect manufacturing according to STREAM-0D methodology and it will finally be demonstrated in three different pilot cases, namely the production of brake boosters, rubber profiles and tapered roller bearings.

The process sequence for each of the pilot cases is also described, where each process and the product related measurements are presented. This way, the requirements for the aforementioned STREAM-0D functionalities will lead to feasible solutions. The collection of the measurements (process parameters / performance indicators) herein forms a superset of the finally considered for reasons of risk mitigation. Also, there is the ambition of completing side-developments that could be useful to the final solution, but more loosely related to it.

Furthermore, lists of sensors that will be used for the purpose of the STREAM-0D research action are presented, so that the transition to the activities of Task 3.2 is smoother.

Finally, the already installed data acquisition systems are introduced as per the end users systems and this will also be useful for the seamless integration between WP3 and WP4.