BACKGROUND
ATLA, based in Italy’s Turin, is a pioneer in the repair and special processes of the high-tech components used in gas turbines (e.g. superalloys’ blades and vanes, operating at over 1500°C temperatures). The company has treated more than 500,000 parts to date.

CHALLENGE
In order to ensure the highest quality of finished products, ATLA chose to introduce a vertically integrated process, where each step of its production process is closely monitored. This new process put pressure on the company to find ways to optimise its operations so that the production cycle can run as efficiently as possible and tasks and responsibilities can be distributed as needed. The company realised that investments into structures, machinery and personnel were needed to make this possible.

The need for a real-time locating system (RTLS) became apparent as the processes within the different departments of the company require components to move from workstation to workstation at varying rates, making it difficult to trace the exact location of each product order.

SOLUTION
ATLA conducted a deep market survey for solutions and ended up choosing a combination of Quuppa’s indoor positioning technology and nfctech.eu’s software application. They offered the best value for money and accuracy, combined with the competence to realise both the location system as well as the integration of this system with the company’s ERP system.

For the solution, a network of Locators was installed onto the ceiling and more than 600 trackable tags were attached directly to the pallets (or other packages such as boxes, cases, containers) containing the components to be processed. The system enables ATLA to know the exact and real-time position of every single set of components being processed in its facility. The software application Prometeo, that was specifically designed and connected directly to the company’s ERP system, associates each tag with a specific production order making it easy for ATLA to manage its processes.

The solution is usable on smartphones, tablets and desktops and allows ATLA to:
+ Locate pallets in real time on a map
+ Display lists of production orders, other related details, serial numbers and crossed processing areas (including date and time of entry and exit) for easy access
+ Automate the loading and unloading operations of items at the facility
+ Display analytics and statistics on pallet handling and status of related jobs

RESULTS
Prometeo has introduced the following competitive advantages for ATLA:
+ Real-time knowledge of the component position, job status and any potential production delays.
+ Automation of all of the component processing operations such as receiving, shipping and lot creation.
+ Increased efficiency due to replacement of paper documents with smartphones and tablets.

“nfctech.eu work was excellent. They were able to adapt to the characteristic complexity of ATLA’s manufacturing. Now we can find and check every item and sub-item around the factory.”

PAOLO VIETA
Control Manager
ATLA S.r.l.

NEXT STEPS
Every day, the continuous monitoring of the progress of products through the facility generates new data for ATLA. The company plans to collect this data and analyse it to identify inefficiencies in its production processes that require further development. For example, the system can identify overloaded departments and production flow bottlenecks that can then be addressed by the company.