Description of the deployed IoT project HARDWARIO

A non-invasive machine monitoring helps increase production efficiency at ArcelorMittal Tubular Products Karvina

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ARCELORMITTAL
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DEPLOYMENT
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The history of ArcelorMittal Tubular Products Karviná dates back to 1918. Its primary focus is producing and selling longitudinally welded steel thin-walled profiles and tubes and thin-walled open profiles. The products are used in various projects, such as in the automotive industry and construction. The original name JÄKL has become an acronym for high-quality steel profiles all over the World.



Before we've started the cooperation, the company only used data collected locally by the operators or data that was only available retrospectively. Although most machines have a PLC, none of them is connected to the Internet, and the data is not processed. Our task was to obtain basic information about production efficiency from the machines and pass it on clearly to the management and the internal IT department.

Solution: CHESTER NB-IoT, HARDWARIO Cloud and Microsoft

CHESTER was a clear choice for a project in an industrial environment. For easier installation, we chose NB-IoT connectivity. Most of the 20 monitored machines allow digital output, so we used the CHESTER Input configuration with modified firmware. Data is being transmitted through the HARDWARIO Cloud to Microsoft Azure, is stored in an SQL database, and visualization and reporting occur in Power BI. The internal IT department accesses the data via the REST API HARDWARIO Cloud and shares the information further with the internal system at individual workplaces.

Benefits of our solution

- CHESTER enabled us to collect data on machine performance without significant investments in infrastructure and intervention in machines.
- Both management and operators have accurate production data available.
- We have deployed the solution almost immediately after agreeing on the connection method to the selected machines.









Request more information about this project and cooperation with us - ask@hardwario.com