

## **Main Bearing Monitoring**

How Teut planned a main bearing exchange with Turbit

Reading Time: 2 Minutes

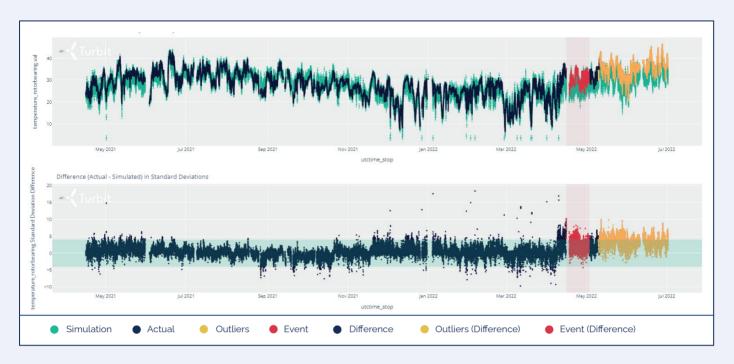
Thanks to Turbit, we were able to respond promptly to temperature issues and prevent damage to our turbine. Their solutions ensure optimal performance, and we appreciate their open communication and regular updates.

Paul Sander ~ Teut

## 1. Detection of Anomalies and Investigation

Turbit's monitoring system detected a change in the normal behaviour of a wind turbine on April 9th, 2022. Turbit immediately issued an alarm, and investigations were carried out by the Turbit team to identify the root cause of the issue: Turbit identified that the main shaft bearing was presenting high temperatures since April 2022 (See graphic below).

Turbit promptly informed the wind park operator.



Temperatures were kept under control during the summer of 2022. However, Turbit identified a significant increase noted from the beginning of November 2022. Turbit promptly informed the wind park operator about the findings, who then escalated the matter to the Original Equipment Manufacturer (OEM).



In response on 30th November, OEM confirmed that the main bearing was slightly damaged and initiated the necessary processes to organize the replacement the main bearing within the scope of a main component exchange action in the next five months. A flushing of the main bearing was performed and an additional second grease pump was installed to prevent further damage to the main bearing.

## 2. Collaboration, Maintenance Strategy and Value for Teut

Throughout the resolution process, Turbit closely collaborated with the wind park operator, providing continuous tracking and monitoring services. This collaboration ensured that the turbine remained operational until the scheduled main component exchange action could be carried out. The Turbit team maintained open lines of communication, delivering regular updates on the turbine's status and promptly sharing any changes in the situation.

In conclusion, the collaborative efforts between the wind park operator, OEM, and Turbit have allowed for proactive planning and organization of the main component exchange action, ensuring high technical availability despite the exchange. This approach has effectively prevented potential downtime and mitigated the risk of more severe damage to the turbine.

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