Power-OM Exploitable Results

Grant agreement no.: 314548

Power-OM

KASEM software and Knowledge Model for Machine-Tool

PREDICT has 15 years of experience in smart Prognostics and Health Management software solutions with its web-based application KASEM®

Within Power-OM solution, ***KASEM*** takes place as a remote solution, providing fleet-wide capabilities. From the local health assessment module developed in the project, two groups of data are made available to the remote server. The first group corresponds to the fingerprint analysis that is condensed in a small amount of characteristics features. For the second group of data, ***KASEM*** acquires data from the working conditions of the machines.

In parallel, a knowledge model has been developed within the knowledge-based system of ***KASEM***. It allows formalizing expert Machine Tool knowledge, in order to make it "operable" together with data coming from the fingerprint and machine operation. The knowledge model integrates machine's functional description as well as failure mode analysis (FMEA).

This way, by coupling knowledge and data, ***KASEM*** is providing highly added-value information allowing to share and capitalize experience at the fleet level.

In practical terms, the data processed in ***KASEM*** allow generating several indicators summarizing the machine's operating conditions. From there, one can access fleet-wide data (fig. 1), specific alert events, from early detection of malfunction (fig. 2) as well as overall fleet summary (fig. 3).

Each event integrates a dedicated lifecycle workflow, in which diagnostics tool allows retrieving fleet-wide past diagnosis and solutions.

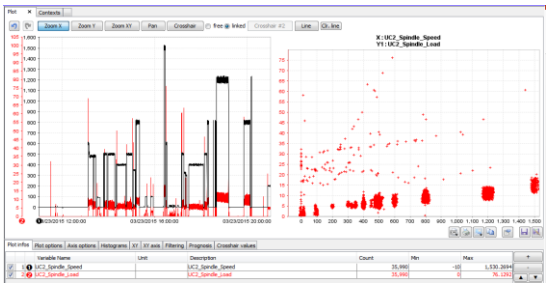


Fig. 1 - Machines operational data analysis

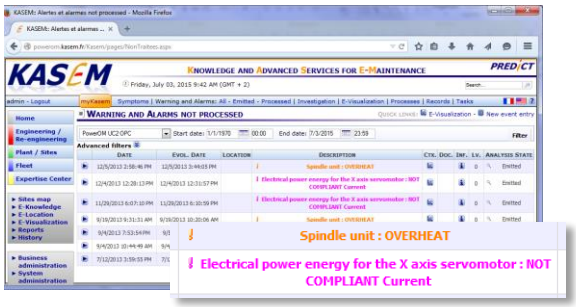
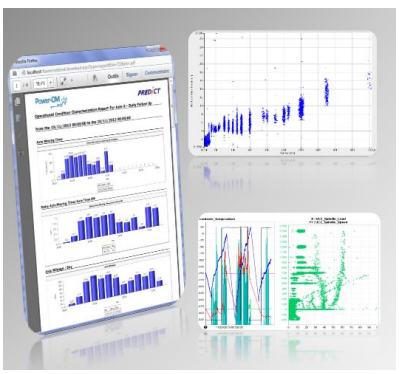


Fig. 2 - Meaningful alert list from Machine health degradation early detection

Fig. 3 - KASEM Dashboard with fleet information summary



KEEP TRACK OF AND MONITOR YOUR FLEET CONDITION AND PERFORMANCE

More information can be found on www.power-om.eu