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Dynamic Maintenance Integrating Various Methods.

Dynamic maintenance is a concept that can enhance maintenance productivity and sustainability by optimizing the process of equipment intervention. It is believed that with a methodology that integrate various data, inherent of equipment and acquired by sensors, maintenance process may be based on a decision-making support system. To select the methods and methodologies with adequate performance to treat data, we had the difficulty of finding the algorithm that could use data from various sources, considering text and numbers from various types of databases. To give shape to the present concept it was choose the Failure Mode and Effects Critically Analysis, where every data from various sources could be framed in criteria with levels. Then to integrate data from equipment condition control, it was modified the originally Failure Mode and Effects Critically Analysis and was called FMECA-CC, and after the need of congregate experts contribute to give more reliable to FMECA it resulted in FMECA-H-CC, a called humanized response of the methodology. In the condition control data, it was used data acquired from vibration sensors and temperature sensors treated with modified Q control charts, and text by counting the number of occurrences of some terms related to equipment maintenance. The results had shown that this is an appliable methodology that give information about the equipment performance giving option of equipment intervention or not.