
A Data-Driven PHM approach for SMEs

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Résumé

In a context of industry 4.0, data management occupies a very important place in the process of continuous improvement of companies. Data management allows to collect statistics information describing the production system and subsequently to better control it using Prognostics and Health Management (PHM) approach. Up to our knowledge, data-driven PHM for Small and Medium Enterprise (SME) have not been studied. Existing works only concerns big corporations and they assume that SMEs can be treated in the same way. However, SMEs have particular specifications that make them different from large companies. To this end, there is a need to review these studies and develop a new PHM process for SMEs that take into account the needs of smaller businesses. The aim of this paper is to first review the existing works on data-driven PHM in the industrial domain and then to highlight the limitation of their application in SMEs. Finally, we propose a data-driven PHM for SME roadmap and we discuss it.

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