



Degradation test plan for Wiener degradation processes

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Résumé en anglais	<p>This study describes an approach to design degradation validation test plan using the Wiener process. This approach allows to link accelerated test results and field reliability without acceleration laws but using a global severity factor when the component to test is not an innovation and an old version is in field. In this condition, field data is available. The field degradation level can be measured and compared to degradation obtained in test. The test severity is evaluated with field and test degradation measurements. We use the same test severity to design a test plan for the new version of component. This test plan is designed to demonstrate a field reliability target with confidence level. The final test plan is obtained using experimental feedback, tests results and numerical simulations. This study shows the necessity to strengthen the test acceptance criterion when the test duration is reduced. This method allows to quantify this.</p>
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Liens

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