Predicting product life expectancy

GlyphWorks’ Accelerated Testing uses the fatigue damage spectrum (FDS), a mathematical approach described in standards NATO STANAG 4370 (AECTP-240)/UK DEF STAN 00-35/MIL-STD-810G. With the FDS, engineers can apply widely used fatigue concepts like the SN curve and Miner’s Rule for damage accumulation. The FDS is computed from either measured vibration data or existing shaker specifications to quantitatively assess the potential for fatigue failure in parts that are exposed to vibration loading. It provides a relative fatigue damage estimate based on acceleration levels and exposure time.

Key Features:

Enables comparison of:

- Different shaker tests: Which is more severe - swept sine or random vibration testing?
- Existing test specification with service vibration data in terms of severity. The Vibration Manager database contains 100+ vibration profiles from various standards.
- Two different sets of service vibration data: Is usage in one region more severe than in another?

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