



Description of the Evaluation Method

The Damage Evaluation method is based on the Rainflow counting and the damage calculation according to Palmgren-Miner. Based on the user defined Wöhler-line the recorder constantly calculates the actual relative damage sum from the Rainflow matrix. The sum of damage is stored on a regular basis together with a time stamp. The demand interval can be set between 0.1 seconds or several minutes. As a result of the measurement, a curve will be generated showing the progress of the relative damage according to time. A sharp increase in the graph is equal to high damage of the vehicle. Via the time stamp these events can be correlated.

Typical Applications and Properties

The storage space required for the Damage Evaluation method compared to the Transient Mode (TM) method is very small. Depending on the numbers of channels and the allocated space, measurement records can be stored for several months and will still allow the acquired data to provide a detailed picture of the damage history. For long-term measurements regarding load or stress calculations, the Damage Evaluation method is the ideal addition to the Rainflow method.