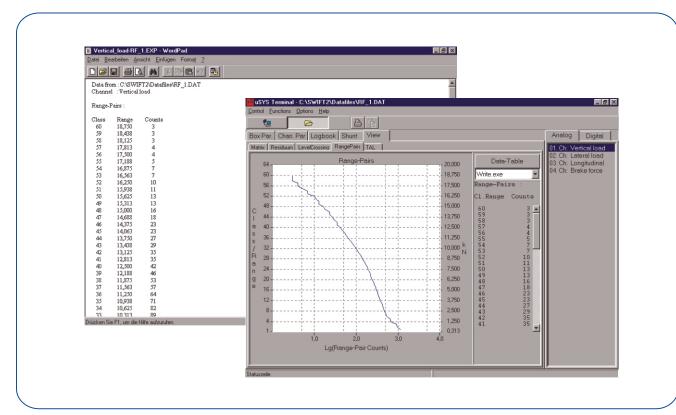


Evaluation Method

RP Range Pair



Description of the Evaluation Method

With this evaluation method the ranges are counted in pairs. That means one range pair is composed by a positive load increase which surpasses a predetermined value and the next negative load decrease of the same magnitude.

By the procedure all double ranges of closed hysteresis loops are counted as in the Rainflow method but neglecting their mean value.

The presentation of results is in form of a cumulative frequency spectrum.

The result depends on the amplitude suppression.

Typical Applications and Properties

This counting method is used for evaluating continuous signal-time histories. The significant advantage of this counting method is that it is one-parametric and can easily be put in a graphical form in a so called spectrum. The disadvantage is that the upper and lower stresses of the load-time history are often not given in the right quantity and the spectrum is then too weak. A comparison with the result of the evaluation method "Level Crossing" is therefore recommended.

Subject to technical alterations (Rev. 1.0_080605)