

#1321: OptiStruct – Static Loading Applied Sequentially in Fatigue Analysis

Product: OptiStruct

Product Version: OptiStruct 2017.2.1 or above

Topic Objective

Static loading applied sequentially in fatigue analysis support in OptiStruct.

Topic Detail

Static loads can now be applied sequentially in fatigue analysis from Version 2017.2

Until Version 2017.2, static loads could only be super-imposed in fatigue analysis

The SQNTL flag on the FATEVNT entry can be used to switch the applied Static Fatigue loads to sequential loading instead of super-positional loading.

TID field on FATLOAD card needs to be blank

Format

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|---------|-----|--------|--------|--------|--------|--------|--------|--------|------|
| FATEVNT | ID | FLOAD1 | FLOAD2 | FLOAD3 | FLOAD4 | FLOAD5 | FLOAD6 | FLOAD7 | |
| | | FLOAD8 | etc | etc | SQNTL | | | | |

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| SQNTL | Flag to switch applied FATLOAD's to sequential loading. If SQNTL flag is present at the end of the FLOAD# list, then the FATLOAD's are applied sequentially as if the individual loads are separate time steps. The location of this field is not fixed; this flag can be specified in the field next to the final FLOAD#. Blank: The FATLOAD's are not applied sequentially and are superimposed. This is the default behavior. Default = Blank (SQNTL, Blank) |
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