LexTech

AFGROW .NET

AFGROW Workshop 2020

AFGROW Future Development

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Workshop 2019 To Do List (Incomplete)

Scale: 10 most important

- Bearing solution for corner crack(s) at a countersunk hole (9)
- Recommend 3 c/s depths
- Make changes to allow the use of spectra with three load channels (5)
- Add a stiffened panel solution? (8) Bulging factors?
- Investigate a 3-D integration method for beta correction (2)
- Include a log file with the Spectrum Manager (list of what was done) it would need to be dated and maintained each time the spectrum is opened. Maybe a separate log file? Like a log used to track changes for software development. (3)
- Integrate Cycle Counter into Spectrum Manager (6)
- Ability to read uncounted data in the Spectrum Manager (6)
- Ability to use beta correction with a weight function solution (5)
- Incorporate Effective width in the bearing beta calculation (5) (Add check box to update bearing load case width)
- Validate a filled hole correction for part-through cracks (10)

Additional Requests from 2019

Lower Priority

- Tim Alred asked about different retardation parameters for the different growth directions (2)
- Scott Fawaz would like the font size for the R & Delta plot and axes to be changed for reporting purposes (3)
- HDF5 binary format for AFGROW database (1)
- Add a check box to put output in the same file as input. Also, allow the same file names for each type. (9)
- Look into notifications for exceeding limits for a corner crack at a C/S knuckle (1)

Email from Börje

Dear All,

A small topic for your discussion.

I saw Teresa Morans slides today (sound was intermittent on-off mainly off).

I noticed that she had "KI-problems" with an ellipical surface crack in a 'thick' section.

Actually, Jim Newman wrote me some three months ago on a similar matter, i.e. he "wish there were Fawaz-Andersson type of solutions to the surface-crack problem".

I know that Newmans solutions for the surface crack problem contain very large errors (which I discovered when I wrote a paper for ICAF in Rotterdam, 2009, it deals with flanges in F18-hornet with corner- and surface cracks.

To derive a data-base for corner and semi-elliptical cracks would require almost no work at all compared to CS-databases. We have only three parameters a,c,t and not a,c,t,R,b. 200 times less work.

Just an idea

Best regards

Börje

Jim G. will contact Borje

Advanced Crack at a Hole Solution Database

- Oblique/Part Through Corner Cracks at Hole (10)
- Double Oblique Crack at Hole (10)
- Double and Single Semi-elliptical Cracks at hole (2)
- Oblique/Part Through Semi-elliptical Cracks at Hole (2)

Spectrum Manager Future Development Plans

- Spectrum Cycle Counting (5)
- Working with counted and uncounted spectra (5)
- Improved Undo/Redo (5)
- Spectrum Severity Comparison (7)
- Combining exceedance curves (4)