

## Changes to FRANC3D from Version 7.1.2 to 7.2

Aug 14, 2018

- 1) Revised bspline curve fitting routines.
- 2) Allow user to not retain the auto-cut-surf nodes and facets.
- 3) Revised nodal force mapping to check for force at midside nodes of the original mesh
- 4) Add material \*damping to Abaqus reader.
- 5) Catch potential crash in Ansys reader if .cdb file is corrupted.
- 6) Add strain to .dtp results reader.
- 7) Fix bug in crack face traction load step temperature output.
- 8) Add options to set the sign of  $K_{\text{equivalent}}$  when using square-root of sum of squares.
- 9) Catch potential crash if original uncracked FE model is corrupted.
- 10) Check for highly twisted new crack surface geometry that cannot be fit to a least-squares plane.
- 11) Fixed bug in Walker and Newman closure models.
- 12) Revised crack front fitting for partial crack front growth.
- 13) Add fatigue crack growth plot dialog to display  $K_{\text{max}}$ ,  $K_{\text{min}}$ ,  $K_{\text{equiv}}$ , etc.
- 14) Adjust triangulation parameters for very high aspect ratio elliptical cracks.
- 15) Update version number and build date and version.
- 16) Documentation has been updated.