

FRANC3D Version 8.0: Modifications and Updates Nov 2021

1. Revised crack insertion and meshing library with support for:
 - a) cracks crossing bi-material interfaces
 - b) crack embedded in bi-material interfaces
 - c) symmetry surface cracks
 - d) finite volume “thick cracks” (notches)
 - e) improved crack front template intersections at model surfaces
2. Revised load schedule/events, with support for:
 - a) combined LCF and HCF loading
 - b) on-the-fly cycle (rainflow) pairing
 - c) Generalized and Modified-Generalized Willenborg load sequence models
3. Computation of fracture parameters for single crystal materials
4. Added display unit settings different from model units with automatic unit conversions
5. Added user preferences to turn on/off menus for fretting fatigue and single crystal fracture
6. Edit Crack Geometry dialog added to view/edit cracks
7. Improved support for partial crack front extension
8. Revised finite element I/O and boundary condition transfer/mapping
9. Updated RLM licensing library to Version 14.1
10. Updated Python module support to Version 3.9
11. Additional error reporting:
 - a) when reading .fdb restart files
 - b) when computing crack growth/fatigue cycles