

Example 8: screw drill

Objective: Observe the delamination and in-plate failure in laminate.

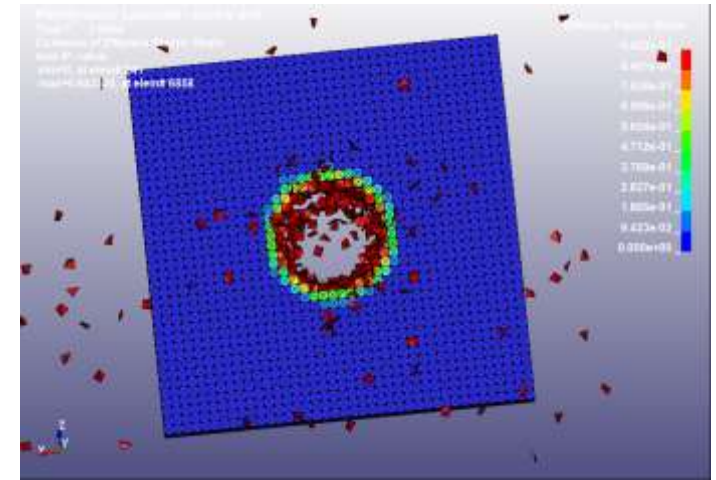
Filename: *ex8screw_drill.k*

Description:

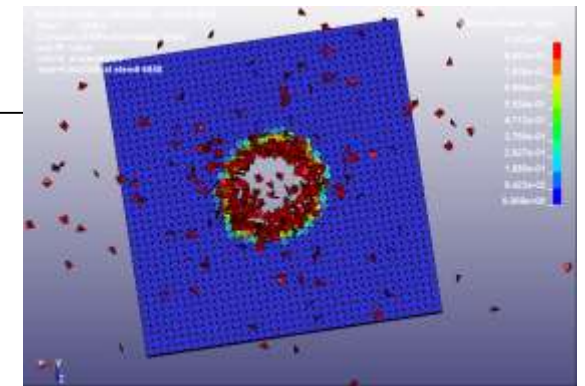
A laminate plate is drilled by a rigid screw. Complex damage patterns are formed in the plate automatically.

You are expected to do the following studies by *beta version of executable* :

1. Copy *ex8screw_drill.k* to directory example8.
2. Obtain the results.
3. In ls-prepost, click **Fringe Component** -> **effective plastic strain**. Here the effective plastic strain indicates the damage value in peridynamics. Play the animation.
4. In ls-prepost, click **Fringe Component** -> **Misc-> History Var #1** for inplate damage and Var#2 for delamination.



Damage pattern, top view



Damage pattern, bottom view