

1c) Correlation between FEA, hand calcs and physical modes can be ~~assess~~ essential to assess the capability, accuracy and ~~assess~~ confidence.

Variables such as Material properties ~~which~~ in consistent young's modulus, stiffness and material voids can occur in real life. An assessment / comparison of these properties is essential.

Also comparing physical properties, as tolerances between material batches and manufacturers vary, so accurate properties in the FEA is essential.

Confidence in a model can be achieved by...

1) Performing a subjective check to understand how stress changes from one element to the next. Drastic stress changes indicate stress gradients to not be accurately captured, where element size could be too large. ~~the mesh~~ FEA mesh should show a ~~smooth~~ smooth contour plot. Hence, emphasising how dangerous it can be showing node stresses instead of elemental stresses.

2) ~~Quantifiable~~ Quantifiable checks can be performed by plotting a convergence... PRO