Bike Crank AIM - Verification & Validation

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Verification & Validation

Please Note: Although this section is using ANSYS Workbench, the point of this video is to make sure our results do, in fact, make sense and can be verified. This video was taken from a previous tutorial using Workbench. Make sure to compare your results with the solution in this video, as they should be the same.

- Check that the solution agrees with the mathematical model
    - Are the boundary conditions on displacement and traction satisfied?
    - Is equilibrium satisfied?
        - Do the reaction forces balance the applied load?
- Check that the numerical error is acceptable
    - Are the ANSYS results reasonably independent of the mesh?
- Compare with hand calculations for the bending stress and maximum displacement

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