ANSYS 12 - Beam (2D Element) - Step 7

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Step 7: Verification & Validation

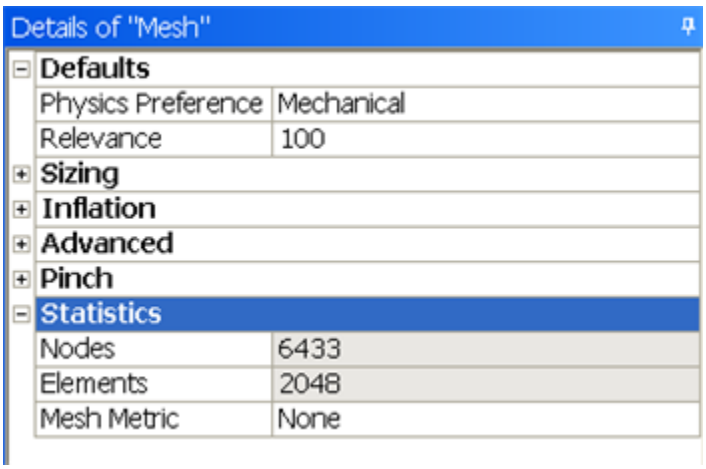
It is ***very important*** that you take the time to check the validity of your solution. This section leads you through some of the steps you can take to validate your solution.

Simple Checks

Does the bending stress agree with the theoretical value? We checked this in step 6.

Refine Mesh

Let's repeat the solution on a finer mesh with smaller element size. Repeat the mesh steps, but this time we have one additional step after inserting the mapped face mesh. Under ***Details of "Mesh"***, expand ***Defaults*** and enter value of 100 for ***Relevance***. Click ***Solve*** to obtain a new solution.



Details of "Mesh"	
Defaults	
Physics Preference	Mechanical
Relevance	100
Sizing	
Inflation	
Advanced	
Pinch	
Statistics	
Nodes	6433
Elements	2048
Mesh Metric	None

How does the refined mesh compare with the original mesh?

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