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Advanced Stress Analysis & FEA
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2pm

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Cont A)

Pre

Processing is where all possible questions need to be answered by creating a Problem Statement, what is the Solution type? Are there Constraints Set out by customer etc.

Pre Processing is the most important Part of the Process So it is extremely important to govern all possible outcomes.

b) Processing is the mathematical Solution to the input criteria in Pre-Proc. Algebraic Matrices happen at a high Speed to Process the model. This differs on whether the model needs to give results quickly or accurately.

c) Steps in Post-Proc? (5)

Once the model has been Completed and a visual representation of the results are displayed, it's important to not take these as face value as results are an approximation.

They need to be evaluated by either Correlating to the test or, hand calculations or Physical testing such as drop tests, Photo elastic techniques, and using accelerometers.

The visual representation can be seen as Stress maps, Contour Plots and heat maps.

By questioning the results it shows a deeper understanding to if they results are as expected. Personal judgement can be used to evaluate the accuracy of results.