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 Advanced Stress Analysis & FEA  
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Cont. b) ~~Other reasons include lack of faith in the model,~~  
 which correspond to the lack of faith in a model  
 due to trusting a Programme/Software in with a  
 dependency on the outcome of failure, if the result is  
 Catastrophic with a risk to life or environment, then  
 physical testing is required, as opposed to a model of  
 a door handle where negative impact of failure may not  
 be as high (with the exception to fire doors)  
 Customers may request physical testing results before the  
 can approve a design due to Contracts or law or organiza-  
 tions.

(6) c) To increase confidence in the FE model the user must  
 Prove that the results are accurate. When meshing the  
 Part the Component may Software may incorrectly mesh,  
 Checks such as aspect ratios or Jacobian method, checking for  
 skewness, element quality should be completed to ensure results  
 are as accurate as possible. By repeating the test with  
 slight deviations such as loading, condition, stiffness, linearity  
 and non linearity, by changing the parameters and if the  
 model still performs well then confidence will increase.  
 The Correlation is needed to as FEA is only an approximation  
 of a physical test. There could be many external forces  
 that an FEA model could overlook such as temperature,  
 material variability, imperfections in design that could cause  
 a failure or unexpected results in a test.