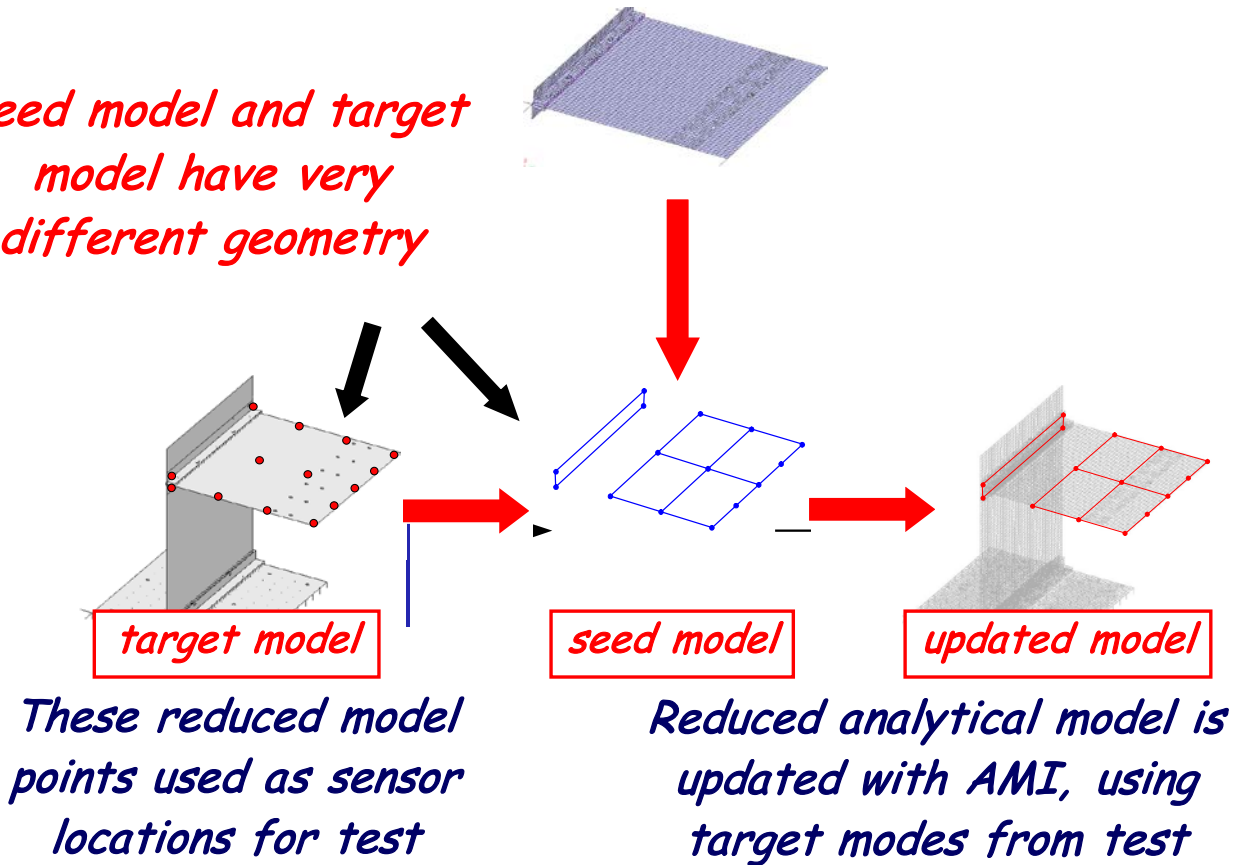




## Modal Based Component Response

*Seed model and target model have very different geometry*



*These reduced model points used as sensor locations for test*

*Reduced analytical model is updated with AMI, using target modes from test*

Accurate system models are important in many applications. Developing accurate reduced order test verified component models is important to the overall system level response. This work centered on the development of these reduced order component models which are updated using direct model updating approaches to obtain accurate component models along with the system representation. A critical difference is that the entire component need not be modeled and the boundary condition effects can be adjusted by utilization of the test data acquired. Due to the direct model updating strategies employed, very accurate system models were developed using extremely limited total degrees of freedom.