

~~Leading~~ MATERIAL. UNDERSTANDING MATERIAL PROPERTIES ARE IMPORTANT TO UNDERSTAND THE MODEL AND WHAT ANALYSIS CAN BE CARRIED OUT FOR EXAMPLES IF A BRITTLE METAL USED IS VON MISES THE BEST USE. AND ALSO MODELLING IN CORRECT MATERIAL WILL GIVE BETTER CORRELATION OF PROTOTYPE.

PHYSICAL PROPERTIES ARE KEY WHEN ~~FE~~ USING DIFFERENT ELEMENT TYPES. Eg 1D WILL REQUIRE SECOND MOMENT OF AREA AND POOR SECOND MOMENT OF AREA. 2D ELEMENTS RELY ON THICKNESS OF MATERIAL IS A. SIMPLE BEAM FOR EXAMPLE. IF WRONG PROPERTIES OR ELEMENTS ARE USED AGAIN POOR CORRELATION WITH PROTOTYPE 3D ELEMENT US ~~SHARP~~ ~~PROP.~~ GEOMETRY PROPERTIES WITH MATERIAL PROPERTIES