**ASSESS STRENGTH OF A ROBOT BRACKET**

A blue and red object

Description automatically generated**A colorful object with holes

Description automatically generated**A silver metal object with red and green circles

Description automatically generated

* A picture containing text, envelope, case

  Description automatically generatedLaunch Inspire.
* Click Open Model on the Files icon. In the "Open File" window, select "Bracket.stmod" file and click "Open."
* Go to File > Preferences > Run Options. Then, select "SimSolid" as the analysis solver.
* Go to Structure > Loads > Force. Apply a bearing force of 222.411 N to the designated hole.

A close-up of a magnifying glass

Description automatically generated

* Go to the "Structure" tab, then navigate to the "Analyze" ribbon.

A screenshot of a computer

Description automatically generated

* Ensure that Solution Adaption is set to "For Stiffness (Faster)".
* Click "Run" to initiate the analysis. The "Run Status" window will appear. A green check mark will appear when the analysis is complete (this may take a few minutes).

A picture containing text

Description automatically generated

* Look for the green flag on the "Analyze" tab. Click on it to view the results. The results will be displayed in the Analysis Explorer.

Exit the Analysis Explorer.

* Go to Sketch and create the following geometry.

A drawing of a ruler

Description automatically generatedA drawing of a wrench

Description automatically generated

A grey metal object with holes

Description automatically generated

* Go to Geometry > Extrude. Extrude the geometry by 11 mm.
* Re – run the analysis on the modified bracket.

**Analysis Result:**

**A blue and red object with white text

Description automatically generatedA blue and red object with holes

Description automatically generated with medium confidence**

A screenshot of a computer

Description automatically generated

Bracket – With stiffener

Bracket – Without stiffener