Additional Reading Material for Performing an Optimum Design in Osdag

We can perform a design in Osdag for two different scenarios:

1. **Scenario 1: Performing an optimum design**

   a. Perform a design from a **suite** of available options in terms of steel sections and connectors like;
      i. Different types of sections (I section, Channels, Angles, etc.)
      ii. Varying plate thicknesses
      iii. Varying bolt diameters and grade combination
   b. Osdag will run design calculations for each of these unique combinations and try to find the most optimum design output
   c. The optimum design is selected based on the total volume of material/lesser number and/or smaller diameter of bolts, etc.
   d. Only the selected optimum design solution is detailed in the output dock and the design report

2. **Scenario 2: Performing a design check**

   a. Perform a design check with a specific set of **single inputs**/selections in the **'Customized'** option
   b. This scenario is like performing a design proof-checking for a specific set of known inputs
   c. In this case, Osdag will run the design calculations for the defined input only, as there is little scope for optimisation.
   d. Finally, Osdag will inform if the design checks are satisfied and suggest changes otherwise

Note:

- Design proof-checking verifies the design for adherence to the various applicable codal provisions and standards.