Home assignment 9

We are going to do a simulation study on a structural steel installation job where 1) structural steel elements arrive at the site from steel fabrication shop 2) structural steel elements are stored in order based on their arrival time by iron worker crew 3) a tower crane moves the elements to their erection location 4) iron worker crew first temporarily stabilizes the steel element on its location to let the crane off and can serve other steel element installation 5) Iron worker crew finishes the installation by bolting and welding the steel elements. There is one crane and two iron worker crews for the operation! The building consists of 500 different steel elements.

Historical input data are presented in the <u>excel sheet attached</u>. You need to develop your own goodness of fit for structural steel element storing and stabilization using Chi square or KS methods based on the number of data provided. Use EasyFit analysis for the rest. Develop a simulation model for the operation using AnyLogic. Explain and submit your data input analysis steps, the developed model, and the achieved results in your assignment report!

Due in two weeks!