

## **Analysis of Train Passenger Seat Using Ergonomic Function Deployment Method**

**Authors :** Robertoes K. K. Wibowo, Siswoyo Soekarno, Irma Puspitasari

**Abstract :** Indonesian people use trains for their transportation, especially they use economy class train transportation because it is cheaper and has a more precise schedule than any other ground transportation. Nevertheless, the economy class passenger seat raises some inconvenience issues for passengers. This is due to the design of the chair on the economic class of trains that did not adjusted to the shape of anthropometry of Indonesian people. Thus, research needs to be conducted on the design of the seats in the economic class of trains. The purpose of this research is to make the design of economy class passenger seats ergonomic. This research method uses questionnaires and anthropometry measurements. The data obtained is processed using House of Quality of Ergonomic Function Development. From the results of analysis and data processing were obtained important changes from the original design. Ergonomic chair design according to the analysis is a stainless steel frame, seat height 390 mm, with a seat width for each passenger of 400 mm and a depth of 400 mm. Design of the backrest has a height of 840 mm, width of 430 mm and length of 300 mm that can move at the angle of 105-115 degrees. The width of the footrest is 42 mm and 400 mm length. The thickness of the seat cushion is 100 mm.

**Keywords :** chair, ergonomics, function development, train passenger

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