

ABSTRACT

JIG design for the cargobike frame assembly process "CASE STUDY OF CARGO BIKE FRAME ASSEMBLY"

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Indonesia has the second largest automotive manufacturing industry in Southeast Asia and in the ASEAN region (after Thailand which controls around 50 percent of production in the ASEAN region) with increasing demand for goods from the market occurring, while the industry must be able to reduce costs and support production, the industry This requires a tool or object that can manage time efficiency which makes it effective in mass production activities, namely by making a tool or object called JIG. As a means of assembling an electric vehicle in the form of a three-wheeled cargo bike, a cargo bike is a bicycle that has a large cargo capacity on the front so it can carry more goods than a motorbike. So that it can be used by expedition couriers or for small-scale sellers (UMKM) in the assembly process it requires a tool in the form of a jig that can make it easier for factory workers and also for the purpose of commercializing cargo bikes so that prices can be competitive, reducing production costs but with a unique design. much more interesting. This tool can be a solution in achieving precision in installing the steering system and installing wheels. Low manufacturing costs and ease of use are the main attraction for a designer to choose this tool to be used as problem solving. So to overcome the problem of ineffective steering system and wheel assembly processes, it is necessary to design special tools to help workers so that the assembly process is faster and more effective

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