## **ABSTRACT**

PT Dharma Precision Parts is a subsidiary of the Dharma Group which was established in 1997 and engaged in procurement of spare parts of motor vehicle. One of the products manufactured by PT Dharma Precision Parts are Arm Stays. Based on Minimum Wage issued by the governor of West Java, Bekasi regency with class 2 worker the average of minimum wage increased by 21% and predicted the values will continue to increase every year.

So for the solution of this increasing winimum wage is the company needs tools / machines that can replace the operator who oerate the machine. Product as a tool / machine must be designed according to functional requirements.

In the previous studies have found the target specifications and concepts selected of the products. This study will be discussed about detail design with enggineering drawing and part spesification as the output, prototyping with the physical prototype and assembly chart as the output and testing of the machine with the feasible machine result as the output.

**Key words**: Autoloader Spot Welding, detail design development, prototype, experiment.