

## **ABSTRACT**

*Bottled Drinking Water (bottled water) is one of human needs at this time. PDAM Tirta Wening is a company engaged in Bottled Drinking Water (bottled water) that produces two types of bottled water, the Cup and Gallon. The process of reproduction started at unloading gallons - gallons that have been previously distributed. Furthermore, continue on process washing of outside gallons and followed by washing the inside using machine. Both of this operation process take about 54 seconds for each gallon, compared with the expected time from the company is about 30 seconds per gallon. So that in this study will make a design that would combine the two processes that can reduce the lapse of time that was mentioned earlier. By using rational product design process by Nigel Cross through six stages, namely Clarifying Objective, Setting Requirements, Determining characteristic, Establishing Function and Evaluating Alternatives, resulting washing tools can combine both operating processes so as to reduce the processing time.*

*By using tools that designed based on the stage that has been mentioned above, it is expected to facilitate the operator in working out the operation and absolutely to reduce the processing time so it can reach the target of the company.*

**Keyword:** *Washing Gallon, Rational Product Design Method, Nigel Cross*