

ABSTRAC

AMDK PDAM Bandung City Company is a startup company that produce mineral water size 220ml and 19liters. The production process, transferring process of 19liters gallon from sealing machine to loading bay is using manual material handling method without material handling equipment. The company has a policy to increase the number of production per day than 300 per day into products 2000 products per day. The transferring process of gallons of capacity manually is 1440 gallons per day so it needs changing methods transfer of gallons into the loading bay with using the tools so that products can be moved in accordance with company target.

Tools used in the relocation process was designed using rational product design process by Nigel Cross. The stages of product design process rational is clarification purpose, set needs and characteristics, the function and sub function, eliciting an alternative concept, and selection of the concept of elected.

The result of research is concept material handling equipment gallons from sealing machine to loading bay that can send gallon accordance with the company's production target.

Key word: *Material handling equipment, product development rasional method, Nigel Cross, Conveyor.*