

ABSTRACT

The industrial sector is the largest sector for electrical energy consumption and continues to increase from year to year based on data from National Electricity Power Sales in the Industrial Sector. PT Buana Intan Gemilang is a company engaged in textile industry. The punching machine is a machine that produces pattern cards that control the shape of the fabric process. The engine still works manually so it takes a long production time and increases waste in the cost of electrical energy. To optimize energy use at PT Buana Intan Gemilang, the company can implement a green manufacturing method on punching machine, the methods that can be applied to the company to reduce energy consumption. The first process to do is to identify the color by classifying the company into the black, brown, gray or green color categories using quantitative analysis with questionnaire distribution. After classifying, the next process is prepare your brush or plan the improvement area to be optimized and analyzed. Improvement plan at this stage that is focusing on energy area and technology. In the next stage of paint it green, this process applies green by modifying the technology through implementing automation system on the punching machine so that there is an increase of green level on the process machine. After applying the green manufacturing method and implementation automation system on the punching machine can optimize the use of energy consumption, cost to use of electrical energy consumption to produce jacquard card on an automated punching machine can save cost Rp 1.068.159/day.

Keywords : Green manufacturing, Cost, Punching machine, Automation System