

ABSTRAK

This research studies physical requirement needed to keep the performance of the worker at highest level by using physiological approach. The study involved 30 workers of PT. Naga Semut, Kebumen, Indonesia. The workers were chosen based on their task in operating Profit Machines. Human pulse rate of 4 workers at different ages which are 20, 25, 36 and 45 years old were taken for cardiovascular load (CVL) measurement. SPSS 16.0 statistic software was used to analyze the collected data from the filled questionnaire. CVL measurement shows that workers whose age above 40 years old had the highest number of CVL, whilst, 20 years old workers had the lowest CVL. Based on the experiment result, it can be concluded that optimum age to operate the Profit machine is below 40 years old.

Keywords : *fatigue, pulse rate, % CVL (cardiovascular load), age*