ABSTRACT

EVALUATION EFFECTIVENESS OF PRODUCTION PROCESS CRUMB RUBBER BASED METHOD OVERALL EQUIPMENT EFFECTIVENESS (OEE)

Natural rubber one of the leading estate commodities in Indonesia, but production of this commodity is not yet effective due to losses during process. The purpose of this study was to determine effectiveness of natural rubber production process based on Overall Equipment Effectiveness (OEE). The study start by identifying problem on production machine because the machine have an important rile in the production activities, the machine used must be in good condition. The effectiveness of the machine can be determined by measuring the OEE value of production machinery rubber. OEE measurement method involves three important factors that influence it, namely availability, performance, and quality to the standard value of these three factors are respectively 90%, 95%, and 99%. As for the standard of the value of OEE is 85%.

The study was conducted at high grade SIR factory (Unit Usaha Way Berulu) for three months observed. The result showed that high grade SIR factory had average 89.58% of Availability, 80.29% of Performance Efficiency, and 99.81% of Quality Ratio, therefore average OEE value was 71.68%.

Keywords: Natural Rubber, SIR, OEE