ABSTRACT

Operator have considerable contribution in the operation of the system trough its role in the completion of their work. Therefore it ie important to know the operator's reliability (human reliability). The levels of human reliability is determined by calculating the potential in making mistakes, known as human erroe. Human error is influenced by the inadequate system design, the working bad situation, the high complexity of the work, the characteristics of human behaviour, the mental and physical fatigue, the working environment and organiational policies.

The main objective of this study was to analyze the reliability of the human operators to control the occurance of human error. This study was an observational with cross-sectional approach. The study was conducted on 14 of operators maintenance machine in PT. Tjokro Putraperkasa.

Data were collected by means of interview and observation. Data were obtained using Hierarchical Task Analysis (HTA) and Standardized Plant Analysis Risk Human Reliability Assessment (SPAR-H).

The result showed that most (80%) of the operators did not wear Personal Protective Equipment (PPE), possible were widely found in preventive maintenance machine bubut, the high score (HEP= 0,0477) of human unreliability was found in operators working intruction in machine bubut, hobbing and CNC, as whole the system reliability was still low, and the majority (80%) of operators were still unreliable in doing their job.

To control the occurence of human error, companies is sugeested to provide a trainng on hazard identification and self-management, improve work intruction, and increase the application of work instruction as well as strictly supervise the wearing Personal Protective Equipment (PPE) during works.

Keywords: Human Error, Human Reliability, SPAR-H.