ABSTRACT

Risk analysis includes risk assessment, risk management and risk communication which are interconnected. Risk assessment provides input for risk management which discusses further about control, then risk communication plays role in the exchange of information in any process of risk assessment and risk management. The objective of this study was to analyze risk of the welding work of unit produksi 3 line A6 PT DutaCipta PakarPerkasa Surabaya.

This study was an observational study with cross-sectional approach. The objects of the study were the process of FCAW welding in line A6. Primary data were collected by means of interview and observation. Data were analyzed descriptively and displayed in tabulation of frequency which had been adjusted with the risk assessment matrix.

Based on this research, there were 22 potential hazards of welding work. There were 25 pure risks assesses, most of the risks (88%) were included in high-risk category. Risks control was applied technically, administratively and by providing of PPE. The implementation of risk control has been applied well, 100% of risks changed to lower risk category. Fifty nine point zero nine percent of high-risk category decreased to low risk category, 40.91% decreased to moderate risk and 100% moderate risk decreased to a low risk. Risk communication was done by interviews and providing information on the welder to support exchange of information on the process of risk assessment and risk management.

This study concluded that most of the risk FCAW welding work on line A6 including high-risk category. On the implementation of control, control measures has been applied well. Company are advised to implement control at moderate risk category based on risk evaluation.

Keyword: Risk analysis, risk assessment, welding work