ABSTRACT

Green manufacturing is a way to minimize waste and pollution through product design and production processes. Where this process involves improving the production process, replacing the latest sources for the limited and others. In this case apply the principles of environmental protection and energy conservation in production activities to reduce industrial waste, energy savings and resource scarcity, and minimize environmental pollution. In the company need to apply green manufacturing is because in Indonesia and for export requirements required an environmentally friendly and sustainable industry. In the leather tanning industry in this study does not yet have a standardization of environmentally friendly products. Therefore this research aims to assist companies in implementing green manufacturing system by way of developing green manufacturing system with ERP-based SCOR model to be able to monitor and integrate manufacturing business process with other business process.

This research begins by mapping the company's business processes on the SCOR model which at this stage required business process, stakeholder, green requirement, green objective and KPI in accordance with green manufacturing. After that, KPI has been verified with the company in accordance with the green objective. Then weighted to know the importance of each KPI. The next step is to design the green manufacturing system based on ERP.

The development of green manufacturing systems is modeled with SCOR to produce KPIs as inputs to applications. The highest priority of KPI is production time. By using an enterprise ERP system can easily monitor the company's performance.