

ABSTRACT

CV.XYZ is one of the manufacturing companies that produce spare parts, molds, jigs & fixtures, and press tools. CV.XYZ establish cooperation with big companies in Indonesia such as PT. Showa Indonesia, PT. Yamaha, PT. Denso, and others. Quality management system that has been implemented in CV.XYZ is ISO 9001: 2008 which aims to guarantee quality products. ISO 9001: 2008 has been changed to ISO 9001: 2015. One of the CV.XYZ customers requires the company to make changes to every process no later than the end of 2017. The resulting product requires a high degree of accuracy, therefore measurement becomes very important for the company. To ensure the accuracy of product measurements, a regularly maintained resource of measurement is required. Resource measurement has been done by calibrating the measuring equipment. Calibration of measuring equipment is done to the vendor because CV.XYZ does not have internal resources to perform calibration. In clause 7.1.5 regulates the monitoring and measurement of resources and focuses on the calibration of the measuring equipment. Measuring equipment used in the company are scales, caliper, and digital depth gages. As a required resource in the production process, measuring equipment need to be calibrated periodically to ensure the accuracy of measurements. Therefore, it is necessary to design the calibration order process of measuring equipment in CV.XYZ to meet ISO 9001: 2015 in clause 7.1.5. The result of the process design is improved using Business Process Improvement method in Apply Improvement Techniques stage so that the proposed process for order calibration of measurement equipment in CV.XYZ. After the process is improved and generate the proposed process then the output of the proposed process is the SOP order calibration tool measuring. This SOP can be used as a company guide in order to process calibration of measuring equipment. The results of this study resulted in KPI to measure process performance, form that became a recording on the implementation process, and also created a web-based application that is Order Calibration Application to facilitate the company in storing the documentation. The application saves the database starting from the measuring activity of the measuring instrument to the activity of receiving the evaluation of the calibration result.

Keywords: Measurement Calibration, ISO 9001: 2015, Risk Management, Process Design, Standard Operating Procedure, Business Process Improvement