

Controlling the Process of a Chicken Dressing Plant through Statistical Process Control

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Abstract : In a manufacturing firm, controlling the process ensures that optimum efficiency, productivity, and quality in an organization are achieved. An operation with no standardized procedure yields a poor productivity, inefficiency, and an out of control process. This study focuses on controlling the small intestine processing of a chicken dressing plant through the use of Statistical Process Control (SPC). Since the operation does not employ a standard procedure and does not have an established standard time, the process through the assessment of the observed time of the overall operation of small intestine processing, through the use of X-Bar R Control Chart, is found to be out of control. In the solution of this problem, the researchers conduct a motion and time study aiming to establish a standard procedure for the operation. The normal operator was picked through the use of Westinghouse Rating System. Instead of utilizing the traditional motion and time study, the researchers used the X-Bar R Control Chart in determining the process average of the process that is used for establishing the standard time. The observed time of the normal operator was noted and plotted to the X-Bar R Control Chart. Out of control points that are due to assignable cause were removed and the process average, or the average time the normal operator conducted the process, which was already in control and free from any outliers, was obtained. The process average was then used in determining the standard time of small intestine processing. As a recommendation, the researchers suggest the implementation of the standard time established which is with consonance to the standard procedure which was adopted from the normal operator. With that recommendation, the whole operation will induce a 45.54 % increase in their productivity.

Keywords : motion and time study, process controlling, statistical process control, X-Bar R Control chart

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