

## **ABSTRACT**

*PT.XYZ is a company that produces V-Belts, which is one type of belt that is usually found on a machine and has a function to move or connect several engine components. In the production period during September 2022 - August 2023, PT.XYZ always produces defects every month. The building process of the slab cutting stage is the process that produces the most defects. This research aims to improve the slab cutting process by using DMAI (Define, Measure, Analyze, Improve) analysis and designing a tool proposal for spacer width inspection using the Quality Function Deployment (QFD) method. The results of this study are in the form of a tool design for checking the width of the spacer which has an indicator to measure the width of the spacer with a size of 10.7 mm according to the standards set by the company and has a length of 120 mm, a width of 40 mm, and a height of 115 mm. This tool can be used at the beginning of the cutting process to ensure the width of the spacer on the cutting knife tool before the cutting knife tool is used for cutting. The estimated cost to make one tool is Rp3.259.984.*

**Keywords: Defect, Spacer, Cutting, DMAI, QFD.**