

ABSTRACT

In 2023, around 1.7% of Indonesia's population adheres to Hinduism or around four million people from Indonesia's total population of 250 million people. One of the MSMEs, namely UD. Dupa Karya Mandiri produces incense products with high demand. However, during the Chinese New Year and Nyepi celebrations in 2023, which should have experienced an increase in demand, it experienced a decrease in market demand due to an increase in the number of rejected (defective) products. This study aims to describe the factors that cause product defects, measure the level of sigma level in incense production, then proceed with efforts to improve product quality. Six Sigma methodology is used to handle this problem. Based on the analysis, the sigma value obtained is 2.1, and the DPMO value is 289.228.10, indicating that improvement efforts are still needed to reduce defective products, with the hope that the sigma value can increase. The results of this study recommend UD. Dupa Karya Mandiri to improve sigma quality by establishing SOPs (Duration of Drying, Use of Incense Materials and Machine Maintenance), using a clear production target system, performing scheduled machine maintenance, checking regularly, making production reports every month.

Keywords: Defective products, Quality, Incense, Six Sigma.