

## ***ABSTRACT***

*Bobbin collapse is the biggest source of defects in the 22-1-SD type monofilament yarn production process at PT. Indonesia Toray Synthetics. This study aims to control the quality by finding the root cause of bobbin collapse and determining the appropriate method to reduce the defect percentage with a standard of 0.5%. Primary data is obtained through direct observation and interviews with related parties in the production process. Secondary data were obtained from documents and reports relating to the 22-1-SD monofilament production process. The results of the study using the DMAIC method showed that the percentage of bobbin collapse had decreased from 1.40% to 0.73% with DPMO 1500.*

*(Keywords: Bobbin collapse, quality control, DMAIC method, DPMO)*





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